CURRENT PRICES OF ENGINEERING MATERIALS

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PRICE CHANGES AND THE BUSINESS OUTLOOK.

The outlook for the future appears less certain than a month ago, yet business is exceedingly active. The difficulty appears to be an undercurrent of distrust of the future. Actual business transactions in most lines are larger than at any time in the past two years, and the profits more satisfactory, yet many business men are doubtful of the future.

The unrest in the labor field and the uncertainty as to the results likely to follow from the increased cost of living is partly responsible for this. The railways have known for months that a widespread demand for increased wages was to be made, and that danger existed of widespread strikes. The difficulties have now been settled on a number of the largest railways by a substantial advance in rates of pay and similar advances will probable have to be made by all other railways whose financial condition makes it at all possible. The effect of these increases on the prevailing rate of wages paid in other industries is bound to be felt in the labor market.

Railway traffic has grown until all the surplus of idle cars which has existed since 1907 has been set at work and complaints of car shortage are heard from some sections. Railway men generally apprehend heavy traffic and a shortage of cars from now until next winter and new equipment is being rushed out of the shops as rapidly as possible.

The apathy of the investigating public toward high-grade security investments is marked. Bond issues of standard grade are selling considerably lower than a year ago. Apparently investors can use their money in other channels so profitably that they are not attracted by a bond issue netting less than 4½ to 5%.

Speculation in rubber shares, in London, is causing anxiety among financial men and was a contributory cause leading to the exportation of gold from America last week.

Crop conditions have improved considerably during the last fortnight, and especially marked improvement is noted in the cotton situation.

Numerous price changes have been made. Pig iron has declined another dollar a ton and coke is cheaper. Steel prices are very much firmer than the trend of the pig-iron market would indicate. Business in the metal trades has been good, but prices are only slightly firmer. The consumption of copper all over the world is greater than any time since 1907. Lumber prices have advanced moderately and the demand shows considerable improvement. A marked improvement is noted in the volume of trade booked by cement makers.

The most important railroad work under way is the construction of about 250 miles of new electric line by the Kansas City & St. Louis R. R. Co. Work is to be started this spring in Howard County, Mo. The Western Maryland is to build 85 miles of new line from Cumberland, Md., to connect with the Connellsville, Pa., coal fields. In Canada, the Grand Trunk has let contracts for 135 miles of line on the Tofield-Calgary branch in Alberta. The Baltimore & Ohio is planning to build a classification yard at Chicago Junction, Ohio. The new Kansas City terminals are being financed. The St. Paul is planning to build a new Mississippi River bridge near Dubuque.

Several water power developments are projected and manufacturers of electrical machinery are working to fully 75% of capacity. A 15,000-HP. hydro-electric plant is contemplated in Salletto, Mex. A 65-ft. dam across the Colorado River, near Austin, Texas, is another $1,000,000 project and plans have been prepared for a 25,000-HP. development on the Chattahoochee River, near Goat Rock, Georgia.

Large building contractors are delaying operations on account of uncertainty in the labor market. The Germania Life Insurance Co. has filed plans for a $1,000,000 building in New York. A series of high-class tenements in the Borough of the Bronx call for an expenditure of upwards from $2,500,000 in one operation. A large department store in Chicago will cost about $3,000,000.

Irrigation work is to be active this season. The Canadian Pacific is planning to spend $12,000,000 for irrigation purposes in Western Alberta and a private concern will spend from $10,000,000 to $15,000,00 on a large development in Canon City, Colorado.

LABOR.

There are sufficient laborers unemployed in New York City to meet the present demands. Outside of New York, conditions are reversed. Large employers of labor express the belief that the demand here will exceed the supply in less than a month. It is extremely difficult to get men to go out of New York. Common labor can be had at $1.50 a day. Longshoremen are paid by the hour. They receive 35 cents, except from the Pennsylvania, where they work steadily, and receive 18 cents. There is a particularly good demand for miners in the Southern coal fields, especially in Alabama, where there is an urgent inquiry.

By far the most important event in the labor world has been an unrest and general demand for higher wages by employees of the railroads. The Baltimore & Ohio difficulty was settled, the men securing higher rates. The Pennsylvania Railroad made a voluntary offer to increase the pay of all employees getting less than $300 a month by 6%. This increase was made effective April 1, but it is expected that the men will make further demands. In 1907, the Pennsylvania made a voluntary increase of 10% before it was demanded, but when the matter was finally settled, an advance of slightly over 17% was conceded to all classes of labor.

The strike among the bituminous miners will probably not be serious, numerous advances having been granted. At least 40,000 unorganized men were granted an increase of 5%. Employees of the trolley lines belonging to the New Haven, in Connecticut and Massachusetts, have received an offer of an increase, and on the Boston & Maine advances have been voluntarily accorded to the motormen on the electrified portions of the road. The strike of the steamfitters in the building trade in New York City has been adjusted. The large building contractors in New York are well prepared to have a strike. In New York Harbor wage difficulties among the pilots employed on the tugs might mean a tying up of considerable freight, but it is expected that this matter will be adjusted.

A demand for a new schedule of wages has been made by 15,000 men in the allied mechanical unions on the Canadian Pacific and Northern railroads. The present contract expires May 1st.

The general strike attempted in Philadelphia to aid the striking car men was a failure. The labor leaders there threatened to call out all Union men in the state, but the sympathetic strikers in Philadelphia were then returning to work.

CEMENT, LIME AND BRICK.

PORTLAND CEMENT.—Conditions in this trade show a decided improvement compared with the previous months of the year. The business booked during the last fortnight, last week of March and so far in April has been very gratifying. With all this, it must be admitted that there was much room for improvement, and, while some mills have practically sold their entire capacity for the year, this is by no means general, and other manufacturers are eager to secure new contracts. Several important orders placed for work on the Ashokan Reservoir and the Barge Canal in New York State have resulted in manufacturers in that state having a very good outlook. In the Lehigh Valley field, too, the feeling is better, and, although there is much additional capacity that can be put in operation, still conditions are much more favorable than they were last year, as far as the volume of business is concerned. It is admitted, though, on all hands, that prices are low, and, despite an advance of 5 cts. in some parts of the West, there is still room for somewhat higher prices.

A conservative summary made by one well posted in the matter is: Trade is governed very largely by the activity in building operations, and the demand for cement may be measured therefrom. Trade for the period 1910 thus far has been somewhat better than the corresponding period 1909; prices are normal, and the supply of cement ample for all demands.

Parts of several plants can only be worked when prices are high, owing to the old kilns. These, of course, would not be brought into operation unless extremely high prices should prevail.

With all the improvement, there is much new business in sight, and, barring labor difficulties, it is expected that April will show an increase over March, as far as the volume of business is concerned. Prices are without change, and for delivery within lighterage limits in New York City we quote $1.43 per barrel; in Philadelphia, $1.42 and in Boston $1.52.

Imported cement continues without change, Alsen's being quoted at $2.42 and Dyckerhoff's at $2.43.

NATURAL CEMENT.—Manufacturers of natural cement have not noted the improved demand that is evident in the Portland field. Business continues rather quiet, with prices unchanged at 80 cts. per barrel delivered alongside of dock, New York City.

LIME.—Business continues to improve, but there is considerable hesitancy owing to the outlook in the building trades. Prices are without change from last month, as follows: For large lots delivered New York City quotations are as follows: State common, per bbl., 75 cts.; Rockland-Rockport common, 92 cts.; Rockland-Rockport special, 320 lbs., $1.37; select finish, 350-lb., net, $1.60; New Milford, $1.30. Hydrated lime for brick work is $6.50 per ton; for finishing, $9 per ton. These prices are far carload lots.

Adamant wall plaster is $6 per net ton delivered at the work.

PLASTER BLOCKS.—For large lots prices are as follows:

Thickness.	Weight lbs. per sq. ft.	Price cts. per sq. ft.
2-in.	7	6
3-in.	8½	6¼
4-in.	11	7¼

These blocks are made 32-in. long by 13½-in. wide containing 3 sq. ft. of surface. The 2-in. blocks are solid, but the others are hollow.

Plaster boards ⅜-in. thick are 16 cts. per sq. yd.

BRICK.—With the opening of navigation on the Hudson River the price of brick dropped, and toward the end of March Hudson River common could be had at $5.50 to $6.25, New York. An increased demand around the first of the month caused an advance of 25 cts. in the inside price. Owing to a better demand in New Jersey Raritan River brick are higher than usual, selling at the same figure as Hudson River.

Boston prices are firm at $7.

In the Chicago market an excellent demand is anticipated. The Illinois Brick Co. made 45,000,000 brick in March, a new high record. The total output in that district is estimated at 1,100,000,000 this year compared with an actual output last year of 966,500,000.

Brick delivered at the work in Chicago are $7 per M.

White enameled brick are in better demand at higher prices, $65 per M. is quoted for the American size (8⅝ × 2¼-in. enameled surface by 4½-in. bed) and $70 to $75 for the English size (9 × 3-in. enameled surface by 4½-in. bed). These prices are f. o. b. Perth Amboy, N. J.

STONE.

HUDSON RIVER BLUE.—Numerous contracts have been made for blue-stone to be delivered later in the year at old prices. There seems to be an opinion that it will be difficult to secure deliveries on these contracts for the prices were admittedly low, and, with the prospect of increasing wages and more particularly higher transportation charges, it might be very difficult to find anyone willing to deliver 3-in. flagging in New York City for 18 cts. Some of the largest shippers are not aggressively going after business, for they believe that the demand will continue and there is a greater possibility of increased prices than diminished inquiry. As noted, quotations are without change, and for delivery either alongside of dock or f. o. b. cars, New York City, prices are as follows:

Flagging, 6 cts. per sq. ft. per in. of thickness; flagging 3-in. thick that will pass New York specifications is 18 to 19 cts. per sq. ft. Some 3-in. stone is sold at 17 cts. Wherever 2-in. stone will answer it can be had at 12 cts. New York with freight added to destination.

Sewer bottoms 5 ft. sq. and 3-in. thick are 25 cts. per sq. ft. Curbing 5 × 16-in. is 35 cts., and 5 × 20-in. is 47 cts. per lin. ft. Belgian bridge, 6 × 24-in. x 5-in. thick is 60 cts. and 6-in. thick is 72 cts. per lin. ft.

Promiscuous shapes of building and foundation stone sell at 70 cts. and 74 cts. per cu. ft.; dressed stone is 82 cts. to 86 cts. per cu. ft.

GRANITE.—Prices are firmer and the demand is good. The large inquiry for paving blocks has had the effect of advancing the prices of granite for building purposes. For promiscuous shapes of Maine granite 45 to 50 cts. per cu. ft. is paid. Dressed granite is 90 cts. to $1.10 per cu. ft.

CRUSHED STONE, SAND AND GRAVEL.

CRUSHED STONE.—Business is brisk, the spring trade being unusually promising and prices are slightly firmer. In New York City, each of the four boroughs has placed orders for 25,000 yds. and on April 4, a contract was let in Yonkers for 8,000 yds. The Department of Docks and Ferries will be in the market shortly for 12,000 yds. In addition to this, there is considerable private work under way for which tentative contracts have been made. As noted, prices are 5 cts. per yd. higher and for full cargo lots of approximately 500 yds., delivered alongside of dock, quotations are as follows: For trap rock, per cu. yd., 1½-in., 90 cts.; ¾-in., $1.10; screenings, 80 to 95 cts. Limestone can be had at about 5 cts. per yd. cheaper.

SAND.—Trade is very good and it is expected that the demand will improve shortly. It must be remembered, however, that construction work has been made possible earlier this year, than previously, on account of the favorable weather conditions. Following the advance noted a month ago, prices are without change. Standard grades of Long Island washed sand being quoted at 35 cts. per cu. yd., delivered alongside of dock. White quartz sand is 58 to 62 cts. a cu. yd. and white quartz grit is 75 cts. per cu. yd.

GRAVEL.—The Brooklyn subway work will probably take a large quantity of gravel and this is served to keep the market very firm. Washed gravel is quoted at 70 to 80 cts. delivered alongside of dock. Roofing pebbles are unchanged at $1.25 per net ton and white quartz roofing gravel is $1.25 to $1.35 per net ton.

IRON AND STEEL.

PIG IRON.—It has been a buyers' market. The terms have been dictated by those who purchased iron, and concessions have been of weekly occurrence. For example, No. 2 Southern iron in Birmingham is $1 a ton lower than last month, and then it had declined fully 50 cts. It would seem as if the productive capacity of the country had outrun the consumptive demands, and that this was the real cause of the weakness. For example, in February the coke and anthracite blast furnaces of this country produced 2,397,254 tons of pig iron. The rate was slightly higher than during January. Buying developed about the middle of the month, and sales for third quarter delivery were made at $13 for Southern iron. A feature of this business was the purchases by several of the large consuming interests. The Westinghouse Company then entering the market for about 15,000 tons. Toward the latter end of the month Basic declined 50 cts. a ton; Bessemer, 25 cts., and charcoal iron, which had been held at $19.50 for over a year, declined to $19. With all the reductions in price, business continued good, the melting of iron being large, and the cast-iron pipe trade more than usually active. It is stated on excellent authority that the subsidiary companies of the U. S. Steel Corporation made a new record in shipments during the month of March.

The following quotations are for lots of 100 gross tons and over f. o. b. cars at the points named: Cincinnati, Southern foundry No. 1, $16.25 to $16.75; Southern foundry No. 2, $15.75 to $16.25; Southern No. 4, $15 to $15.25. In Philadelphia Eastern Pennsylvania No. 2X foundry is $18 to $18.50; Eastern Pennsylvania plain, $17.50 to $18. In Chicago Northern foundry No. 2 is $18 to $18.50; Southern foundry No. 2 is $16.85 to $17.35. In Pittsburg Bessemer is $18.40, including the 90-ct. freight rate from the Valley. All of these prices representing reductions are from $1 to $2 per ton compared with report of last month.

"The Iron Age," in to-day's issue, figures the March production of coke and anthracite pig iron as 2,615,216 tons. The daily rate was 83,363 tons, compared with 85,616 tons in February. The falling off was entirely due to a curtailment in the production of steel work's furnaces. The active capacity on April 1 was 200 tons less per day than on the first of last month.

STRUCTURAL SHAPES.—Frequent reports are heard of concessions in price amounting to $1 to $2 per ton. These rumors are vigorously contradicted, but apparently there is considerable foundation for the report. There is no doubt that the increased capacity of the fabricating mills of the country is rapidly telling, and that fabricating work is done considerably cheaper now than was the case in 1906 and the early part of the following year. Some structural steel contracts for fabricated material have been taken at remarkably low figures recently.

Business from car manufacturers has been exceptionally good. The car builders had large orders; perhaps 1,000 cars a day, and have made contracts for the structural shapes. The most important work coming up is reported by Chicago fabricators. They are working on fully 50,000 tons of bridge material, including one 12,000-ton structure for the Northern Pacific. The Union Depot in Kansas City calls for 18,000 tons, and an addition to the Gary plant for 6,000 tons. Bids have been asked for about 4,000 tons of material to be used in lock gates for the Panama Canal. The nominal prices are unchanged from last month as follows in cts. per lb. f. o. b. Pittsburg: I-beams and channels, 3 to 15-in., 1.50 to 1.55; over 15-in., 1.65; H-beams over 8-in., 1.75; angles, 3 to 6-in., 1.60; over 6-in., 1.65; zees over 3-in., 1.60; deck beams and bulb angles, 1.80; hand rail tees, 2.80.

Chicago store prices in cents per pound are as follows: Angles, 3 to 6-in., 2 to 2.10; over 6-in., 2.10 to 2.20; the beams and channels base, 2.

STEEL RAILS.—New business in the steel rail trade was not as active as during February. In the Winter months, however, railroads generally make their contracts for the year's delivery. The principal feature of business has been the foreign inquiry.

The leading interest has sold at least 70,000 tons for export, 12,000 tons of which go to railroads in Queensland. There was also an inquiry in the market for about 20,000 tons of rails for Manchuria. American mills could not compete, however, and these will be rolled by a Chinese mill in Hanchow. Among the domestic orders taken are 10,000 tons to Southwestern roads, 15,000 tons to the New Haven, half of which are to be Bessemer, an additional tonnage for the Southern Railway amounting to 42,000 tons, with 20,000 tons for this interest remaining to be placed.

Small lots, carloads, are 50 cts. a ton higher than the following prices, which are for 500-ton lots and over f. o. b. Pittsburg: Standard sections, 50 to 100-lb., $28; 40 and 45-lb., $27; 30 and 35-lb., $27.50 to $28.50; 20 and 25-lb., $27.75 to $28.25; 12 and 14-lb., $29; 8 and 10-lb., $32. Relaying rails can be had at $22 to $26, according to delivery and quality.

TRACK SUPPLIES.—Business in the line of track supplies has been very good. Maintenance of way work by railroads has been actively pursued, and it is probable, barring unforeseen labor difficulties, that this will continue, as tracking has been slighted for two years at least. It is getting to be rather difficult to secure any reasonable kind of deliveries.

Prices are unchanged. Standard railway spikes, 4½ × 9/16-in. and larger, are quoted at 1.80 to 1.85 cts. per lb. Boat spikes are 1.80 cts. base. These prices are for carload lots and larger f. o. b. mill, 10 cts. per 100 lbs. advance being charged for small lots. Track bolts with square nuts are held at 2.30 to 2.50 cts. per lb., and angle bars 1.50 to 1.55 cts. per lb. in Chicago and Pittsburg.

PLATES.—The largest single contract taken in a long time was the 10,000-ton order for the Bull Run Conduit in Portland, Ore. This was taken at a very close price, and the plates will be rolled by the Carnegie Steel Co. Brooklyn, N. Y., is soon going to make inquiries for plates, and probably some more business will be forthcoming for the Ashokan contract.

The greatest business, however, in the plate line has been from the car builders. The Pressed Steel Car Co. is turning out from 100 to 120 cars daily, and all other manufacturers are busily engaged with all of their forces turning out rolling stock as rapidly as possible. It is probable that orders have been placed for the last month for at least 30,000 cars. The steel car plants have as much business as they can take care of for the next three or four months. Shipbuilding work on the Coast is at a standstill, but some lake boats are being built.

Prices are unchanged and for mill shipments are quoted as follows per lb.: ¾-in., thick up to 100 ins. wide, 1.55 to 1.60 cts.; ¼ to 3/16-in. thick, 1.65 to 1.70 cts. Under 3/16-in. and heavier than No. 8 gage, 1.70 to 1.75 cts. No. 8 and No. 9 gage, 1.80 to 1.85 cts. Store prices in Chicago are 2 cts., base.

STEEL CASTINGS.—Quite a little business has developed in the steel casting line, and prices are fairly firm. Open-hearth castings weighing from 100 to 500 lbs. are 3½ to 5 cts. Crucible castings of approximately the same weight are from 7¾ to 9 cts.

CASTINGS, GREY IRON.—Business has been better than for some time. Prices are fairly steady. Heavy work for sewers and streets can be had at 1.5 to 1.75 cts. per lb. General building casting such as columns, column-caps, plates and treads are 1.75 to 2 cts., although for large building where columns are uniform the inside price would be shaded. Stair work is 2 to 2.25 cts. per lb.

PILING, SHEET STEEL.—Orders have been rather light, but prices are steady, despite weakness in other lines of steel. For small lots 1.60 to 1.70 cts. per pound f. o. b. Pittsburg is quoted, but this would be shaded for desirable orders.

CAST-IRON PIPE.—A feature of the cast-iron pipe trade has been the numerous contracts for small lots, consisting of extension of existing systems, or new ones. These individual contracts are of little importance in themselves, but in the aggregate they make up a large tonnage. Among the larger work noted is an inquiry for 3,000 tons from Milwaukee; a 2,500-ton inquiry from Los Angeles, and 3,500 tons from the Portland Gas Co., Portland, Ore. Some large contracts were let last month for water-works extensions in the Borough of The Bronx, New York City.

In spite of the lowering of pig iron, the concessions in cast-iron pipe have been slight, indicating, of course, that the foundries making this clas of work have enough business on their books so that they were not actively competing for orders. This condition might disappear very quickly, however. We quote prices as follows per net ton f. o. b. cars at foundry: Birmingham, Ala., 4 to 6-in., $25; 8 to 12-in., $24; over 12-in., $23. Chicago, 4-in., $28.50; 6 to 12-in., $27.50; 16-in. and larger, $26.50. In New York, 6-in. is quoted at $25.50 to $26. Gas pipe is held at an advance of $1 per ton in all markets. Specials are $50 to $60 per ton, or 2½ to 3 cts. per lb. For large work, however, the inside price would be shaded.

RIVETS.—With the large business being taken by steel car makers, the rivet trade has been surprisingly good. Prices, however, are unchanged from last month as follows: Structural rivets, ¾-in. and larger, 2.15 cts., base; cone head boiler rivets, ¾-in. and larger, 2.25 cts., base; ⅝-in. and 11/16-in. take an advance of 15 cts., and ½-in. and 9/16-in. take an advance of 50 cts.; in lengths shorter than 1 in., also take an advance of 50 cts. The above prices are absolutely minimum on contracts for large lots, makers charging the usual advance of $2 to $3 a ton to the small trade.

FREIGHT RATES.—The freight rates, on finished steel products, from the Pittsburg district, including plates, structural shapes, merchant steel and iron bars, pipe, fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows, in cts. per 100 lbs.: Albany, 16; Buffalo, 11; Boston, 18; Baltimore, 14½; Canadaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

WIRE ROPE.—Trade is fair. The discounts to the larger consumers are 42½% and 2½% discount from list for galvanized and 50% and 2½% for plain. The net prices of galvanized are as follows:

Diameter in inches.	Cts., per ft. 7 Wires to Strand.	12 Wires to Strand.
½	3.4	4.
⅝	4.5	5.1
¾	5.1	5.5
⅞	6.75	7.3
1	7.75	8.8
1¼	13.5	10.2
1⅜	15.2	14.
1½	20.	21.
1⅝	21.5	22.5
1¾	25.	26.

ROOFING, CORRUGATED.—Business has been very good up to within the last fortnight, when it tapered off sharply. This was purely on account of the unrest in building trades, but has caused a marked diminuation in the demand for corrugated sheets.

Quotations are unchanged from last month and for 100 sq. ft. of roof surface are as follows: Carloads, Pittsburg, No. 28 painted, $1.70; No. 28 galvanized, $3. From store, New York, No. 24 painted, $3.85; galvanized, $4.80; No. 26 painted, $2.95; galvanized, $4; No. 28 painted, $2.60; galvanized, $3.75.

ROOFING TIN PLATE.—The terne plate used for roofing is sold by the box of 112 sheets. Store prices in New York City are $8.50 per box of IC, 20 × 28 in. plates, with an 8-lb. coating. Plates of the same size with a 15-lb. coating are $10.40; 20-lb. coating, $13, and 40-lb. coating, $16.50.

SHEETS.—While premiums of $2 to $2 were demanded and paid a month ago, this has entirely disappeared and sheets now are being sold at the regular mill quotation. The stocks in the hands of jobbers are better than for some time and seem to be accumulating. Mill prices for carload lots are unchanged from last month, as follows:

	Cts. per lb. Black.	Galvanized.
Nos. 3 to 8	1.70	....
Nos. 9 and 10	1.75	....
Nos. 11 and 12	1.80	....
Nos. 13 and 14	1.85	2.50
Nos. 15 and 16	1.95	2.60
Nos. 17 to 21	2.20	2.75
Nos. 22 and 24	2.25	2.90
Nos. 25 and 26	2.30	3.10
No. 27	2.35	3.30
No. 28	2.40	3.50

Store prices Chicago are as follows:

	Cts. per lb. Black.	Galvanized.
No. 10	2.30	3.25
No. 12	2.35	
No. 14	2.40	
No. 16	2.50	3.35
Nos. 18 and 20	2.85	3.40
Nos. 22 and 24	2.90	3.55
No. 26	2.95	3.70
No. 27	3.00	3.95
No. 28	3.10	4.15
No. 30	3.30	4.55

OLD MATERIAL.—Signs of an improvement are noted and there has been a general advance from the low level of the middle of March. Some of the prices quoted to-day show an advance compared with the last report, notably railroad wrought which is from 25 to 75 cts. a ton higher than last month. Wrought pipe is easier and so is heavy machinery cast.

The steadiness of the old material market in the face of declining pig iron prices occasion no surprise to those conversant with the situation. The decline in scrap came first, as it always does. This is because the scrap market is never held up by any artificial stimulus; it has no friends. Some of the rolling mills have begun to buy again.

Prices are as follows:

	Per gross ton— New York.	Chicago.	Cleveland.	St. Louis.
Old steel rails (under 6 ft.)	$15.00 to $15.50	$17.00 to $17.50	$16.00 to $16.50	$13.50 to $14.00
Malleable cast	15.50 to 16.00	.....	14.00 to 14.50	.....
Heavy steel	14.25 to 14.75	15.00 to 15.50	15.00 to 15.25	13.50 to 14.00
	Per net ton—			
R. R. wrought	$16.75 to $17.25	$13.75 to $15.25	$15.00 to $15.50	$13.00 to $14.50
Pipes and flues	13.50 to 14.00	11.00 to 11.50	.....	10.50 to 11.00
Stove plate	11.00 to 11.50	12.50 to 13.00	12.00 to 12.50	9.50 to 10.00
Machinery cast	14.00 to 14.50	14.50 to 15.00	14.00 to 14.50	13.00 to 13.50

NAILS.—The demand is seasonable, but prices are without change as follows: Carloads to jobbers, $1.85; to retailers, $1.90; less than carload to jobbers, $1.90; to retailers, $2. From jobbers' store, New York, $2.10 is quoted. Cut nails are $1.85 base, Pittsburg, and $2.10 base, from store New York. All these prices are for kegs of 100 lbs.

WIRE.—Trade in this line has picked up considerably. The stocks in jobber's hands have been reduced and the same is true of the holdings by the mills.

The base prices, to retailers f. o. b. Pittsburg, are as follows: Carloads, annealed, $1.70; galvanized, $2. Less than carloads, annealed, $1.80; galvanized, $2.10.

Barb wire painted is $1.95 for carloads, and $2 for smaller quantities; galvanized is $2.20 for carloads and $2.30 for small lots.

Staples are $2.43, Chicago, to retailers in less than carload lots. All of these prices are per 100 lbs.

MERCHANT PIPE.—The pipe trade could be a great deal better than it is. Stocks are large and some jobbers have entirely too much on hand. At the mills too there is a feeling that product is not moving as rapidly as desired, and some concessions have been made. The independent producers, however, are very chary about cutting price after the costly experience of last year. Specifications against existing contracts have not been up to expectations. The regular discounts are unchanged at 78% for ¾ to 6-in. black, 72% for 7 to 12-in. black, and 68% for ¾ to 6-in. galvanized, 57% for 7 to 12-in. galvanized. The net prices in the following table have been computed at these discounts:

	Steel Pipe in Cts., per ft., f. o. b. Mill. Black.	Galvanized.
¾-inch	2.53	3.68
1 -inch	3.63	5.28
1¼-inch	4.95	7.20
1½-inch	5.94	8.64
2 -inch	7.92	11.52
2½-inch	12.67	18.30
3 -inch	16.61	24.16
4 -inch	23.76	34.56
5 -inch	31.90	46.30
6 -inch	41.36	60.16
7 -inch	65.80	101.05
8 -inch	79.00	107.50
9 -inch	95.20	146.20
10 -inch	112.00	172.00
11 -inch	126.00	193.50
12 -inch	137.20	210.70

SWEDISH STEEL.—The greatest difficulty the sellers of Swedish steel have to contend with it getting the material from abroad. The strike there has been of long duration and very costly. The production for several months have been only about 50% of normal.

Flat bars are sold at 6 cts. per lb. base from store. The sizes in most common use are either sold at the base price or 1 ct. above.

Drill steel, either round, hexagonal or octagon, is 6 cts. per lb. for all sizes ⅝ to 2 ins. For sizes 2⅛ to 3 ins. 7 cts. is quoted and 3⅛ to 4 ins. is 7½ cts.

Hollow drill rod is held at 12½ to 15 cts. for the imported.

Anvils of Swedish steel are held at 9 to 9½ cts. per lb. They weigh from 80 to 600 lbs.

BAR IRON AND STEEL.—Prices are lower than last month, yet business is very good. The quotations following are for lots from jobber's store:

Refined iron:	Cts. per lb.
1 to 1⅞-in. round and square	1.90
1½ to 4 in. × ⅜ to 1 in.	1.90
1½ to 4 in. × ¼ to 5/16	2.10
Rods—⅝ and 11/16 round & square	2.10
Angles:	
3 in. × ¼ in. and larger	2.10
3 in. × 3/16 in. and ⅛ in.	2.35
1½ to 2½ in. × ⅛ in.	2.35
1½ to 2¾ in. × 3/16 in. & thicker	2.10
1 to 1¼ × 3/16 in.	2.20
1 to 1¼ × ⅛ in.	2.30
⅞ × ⅛ in.	2.40
¾ × ⅛ in.	2.50
⅝ × ⅛ in.	3.55
½ × 3/32 in.	4.35
Tees:	
1 in.	2.85
1¼ in.	2.45
1½ × 2½ × ¼ in.	2.15
1½ to 2½ × 3-16 in.	2.35
3 in. and larger	2.15
Beams	2.10
Channels, 3 in. and larger	2.10
Bands—1½ to 6 × 3-16 to No. 8.	2.35
Norway bars	3.60
Bessemer machinery, Steel	1.90
Cast steel, base	7.00
Special cast steel, base	14.00 to 15.00

SWITCH POINTS.—The inquiry is not as large as last month, but there is more export trade.

The following prices are named f. o. b. mill for switch points in lots of ten or more pair: For 60-lb. rail, 10-ft. points, $16.25; 15-ft. points, $22.50; for 70-lb. rail, 10-ft. points, $18; 15-ft. points, $25; for 80-lb. rail, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, 15-ft. points, $30.50; for 100-lb. rail, $33.50. All of the above are furnished with three rods, except the 10-ft. points for 60 or 70-lb. rail, which have only two.

SPIRAL RIVETED PIPE.—Prices continue unchanged from the last report. The prices given below are f. o. b. factory, freight equalized, with New York City being figured at a discount of 50 and 10 and 10% from list. They are for orders amounting to about $250. For large orders, of several carloads, prices are from 12½% to 20% cheaper.

Diameter in ins.	*Thickness of Birmingham steel, wire gage.	Price per 100 ft. With bolted joints complete. Plain.	Asphalted.	Galvanized.
3	20	$12.80	$14.21	$20.70
4	18	19.76	21.48	30.74
5	18	23.49	25.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	54.10	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.32
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.80	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	228.44
20	12	183.79	193.30	248.39
22	12	200.48	210.64	269.21
24	12	219.92	231.07	293.99
26	10	280.26	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	339.15	430.64

*Made in both lighter and heavier gages at corresponding differences in price.

FROGS.— For mill shipments more, prices are as follows: Bolt 7, for 60-lb. rail, $15; for 70-lb. for 80-lb. rail, $18; No. 8 frog rail, $21; for 100-lb. rail, $23. No. 7, riveted to ⅝-in. plate for $18; for 70-lb. rail, $20; for $21.50. No. 8 frogs bolted to a for 90-lb. rail are $25.50; for 1 $27.50.

CHAIN.—Prices of machine m per 100 lbs., f. o. b. Pittsburg, lows:

Size in inches.	Proof.	BB.
3-16	$8.25	$9.50
¼	5.70	6.50
5-16	4.70	5.90
⅜	4.15	5.40
7-16	3.85	5.10
½ & 9-16	3.65	4.90
⅝	3.55	4.80
¾	3.45	4.70
⅞	3.35	4.60
1	3.25	4.50
1¼ & 1⅛	3.35	4.60

Hand-Made Chain.

Size in inches.	BBB crane chain.	BBB crane, dredge hoisting or steam shovel hoisting chain.	Special "Warwick" crane, hoisting, steam shovel hoisting and dredge hoisting chain.
⅝	$7.95	$8.20	$9.15
¾	7.15	7.45	8.45
⅞	6.70	6.90	7.95
1	6.15	6.40	7.45
1⅛	5.75	5.95	6.90
1¼	5.65	5.90	6.85
1⅜ to 1⅞	5.55	5.75	6.80

LAG SCREWS.—Prices continue unchanged from last month. They are sold at a discount of 75 and 10% from list. Net prices are as follows:

	Price per 100— ¼-inch.	¾-inch.	1-inch.
3½-inch	$1.17	$2.40	$5.00
4-inch	1.25	2.55	5.25
4½-inch	1.33	2.70	5.50
5-inch	1.40	2.85	5.80
6-inch	1.58	3.20	6.40
7-inch	1.73	3.50	7.00
8-inch	1.82	3.85	7.60
9-inch	2.05	4.10	8.20
10-inch	2.25	4.45	8.75
11-inch	2.40	4.70	9.30
12-inch	2.60	5.00	9.90

BOLTS.—Prices are unchanged. The discount on common carriage bolts, to the retail trade and larger consumers, is 70 and 7½% from list, on bolts ⅝ × 6 ins., and smaller. The lowest price is 65 and 5% discount for larger and longer bolts. Net prices are as follows:

Length in inches.	Diameter in inches— Net price per 100. ⅝	½	¾
4	$0.74	$1.22	$2.86
5	0.83	1.36	3.15
6	0.92	1.52	3.50
7	1.22	1.65	3.75
8	1.34	1.80	4.25
9	1.45	1.95	4.50
10	1.55	2.20	4.75
12	1.75	2.40	5.25
14	1.90	2.70	5.90
15	2.05	2.85	6.25
18	2.40	3.25	7.20
20	2.60	3.50	7.75

REINFORCING MATERIAL.

TRIANGULAR MESH.—Business has been good, fully 100% increase compared with last year. Sales in New York City alone are averaging 1,000,000 sq. ft. monthly. Among recent contracts is one for 250,000 sq. ft. for the New York Central, one of 400,000 sq. ft. for two Fourth Ave. New York buildings. Prices are as follows:

Style No.	Price per 100 sq. ft. Cross sec. area per ft.	width.	Carload lots.	Smaller quantities.
4	.102		$1.03	$1.25
5	.077		.82	.99
6	.058		.65	.78
7	.041		.50	.61
23	.170		1.73	2.08
24	.142		1.48	1.80
25	.124		1.32	1.60
26	.110		1.20	1.45
27	.085		.98	1.19
28	.066		.81	.98
29	.049		.67	.81
31	.261		2.55	3.08
32	.225		2.20	2.67
33	.196		1.96	2.38
34	.146		1.51	1.82
35	.109		1.20	1.45
36	.075		.89	1.07
38	.380		3.62	4.38
39	.325		3.12	3.77
40	.283		2.74	3.30
41	.208		2.08	2.52
42	.151		1.58	1.92
43	.101		1.13	1.36

This material is made in regular widths of 18, 22, 26, 30, 34, 38, 42, 46, 50, 54 and 58 ins. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special lengths is charged extra.

INTERLOCKING PLATES.—For interlocking steel plates, of 24 gage black steel f. o. b. mill central Ohio, the following prices are named:

Length.	Per 100 sq. ft. Weight.	Price, Flat.
Under 4 ft.	100 lbs.	$11.50
4 to 6 ft.	160 lbs.	16.00
6 to 8 ft.	160 lbs.	15.00
8 to 10 ft.	160 lbs.	14.00
10 ft.	160 lbs.	13.00

Curved sheets are held at an advance of $1 per 100 sq. ft. over flat.

For a desirable order prices might be shaded about 10%.

EXPANDED METAL.—Trade is very good and some large contracts have been taken recently. The prices given in the following table are for small quantities, delivered from a warehouse, either New York or Pittsburg. For large lots concessions would be made.

Mesh, ins.	Section in sq. in. per ft. width.	Weight, in lbs., per sq. ft.	Size of Standard Sheets in ft.	Price per sq. ft. f. o. b. New York.
½	.209	.74	8 × 3 or 6 ft.	5.5
½	.225	.80	6 × 8 or 12 ft.	6.2
¾	.207	.70	4 × 8 or 12 ft.	5.5
1½	.166	.56	5 × 8 or 12 ft.	4.8
2	.083	.28	6 × 8 or 12 ft.	2.4
2	.148	.50	5.25 × 8 or 12 ft.	2.6
3	.178	.60	6 × 8 or 12 ft.	2.8
3	.267	.90	4 × 8 or 12 ft.	3.8
3	.356	1.20	6 × 8 or 12 ft.	5.
3	.400	1.38	3.5 x 8 or 12 ft.	6.2
3	.600	2.07	4.66 × 8 or 12 ft.	8.3
4	.093	.42	4.5 x 8 or 9 ft.	2.8
6	.245	.84	5 × 8 or 12 ft.	3.7
6	.368	1.26	5 × 8 or 12 ft.	5.

BARS, CONCRETE REINFORCING.—The steel makers are not getting the tonnage of their desire, and there is active competition for business. The makers of bars who use scrap for their raw material are able to get their material at concessions from former prices. Then, too, there is an abundance of raw material. Some prices as low as 1.40 cts. Pittsburg have been heard, but this is cheap, and it probably would only be done under exceptional circumstances.

Prices are as follows:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.50 to 1.60	1.55 to 1.65
⅞-inch	1.55 to 1.65	1.60 to 1.70
1-inch	1.60 to 1.70	1.65 to 1.75
1¼-inch	1.75 to 1.85	1.80 to 1.90
1½-inch	2.00 to 2.10	2.05 to 2.15

Bar from stock Pittsburg are usually cut to the required length without extra charge. Prices are as follows:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.70 to 1.80	1.80 to 1.90
⅞-inch	1.75 to 1.85	1.85 to 1.95
1-inch	1.80 to 1.90	1.90 to 2.00
1¼-inch	1.95 to 2.05	2.05 to 2.15
1½-inch	2.20 to 2.30	2.30 to 2.40

*The price of deformed bars varies according to the shape and some are held much higher than these prices.

Twisted bars are held at an advance of 10 to 25 cts. over plain bars.

The base price on plain bars from store, Chicago, is 2 to 2.10 cts.

EXPANDED LATH.—Prices continue without change. The price for carload lots given below is f. o. b. mill central Ohio:

Carload Lots.—Price in cts. per sq. yd.

Gage.	Weight per sq. yd.	Black.	Painted.	Galvanized.
27	2¼ lbs.	11½	12	18½
26	2½ lbs	12½	13	19½
25	3 lbs.	13½	14	20½
24	3.4 lbs.	14	14½	21

Small Lots from Store.—Price in cts. per sq. yd.

Gage.	Black.	Painted.	Galvanized.
27	13¼	14	20½
26	14½	15	21½
25	15½	16	22½
24	16	16½	23

This lath is packed 9 sheets to the bundle.

DIAMOND LATH FROM STORE.

Designation.	Gage.	Weight per sq. yd.	Price Per sq. yd. Black, cts.
A	24	4 lbs.	20
A Special	24	4 lbs.	18
B	27	2.9 lbs.	16½
B Special	27	2.9 lbs.	15
B B	27	2.33 lbs.	14
Square Twist	24	4 lbs.	20
Diamond No. 24	..	3.75 lbs.	20
" No. 24 Special	..	3.00 lbs.	16½
" No. 26	..	2.66 lbs.	16½
" No. 26 Special	..	2.1 lbs.	14
Square Twist No. 27	..	2.75 lbs.	14½

METALS.

COPPER.—The buying which commenced late in February continued for the first fortnight of March, and it is probable that more metal was sold to domestic consumers in the four weeks ending March 15 than in any period of the same length since 1906. The copper market is in better shape than in a long time, and consumption is nearly equal to production. The brass mills and the sheet copper manufacturers are extremely busy, but the manufacturers of wire are not working to over half capacity. Their business, however, has improved during the last month. To show how marked the improvement has been, figures recently compiled show that the average daily deliveries into domestic consumption were 1,600,000 lbs. during the first quarter of 1909. In the corresponding period this year they were in excess of 2,400,000 lbs., indicating an increase of 50%. The only thing that holds the copper market on its present low level is the enormous surplus of metal both here and in Europe. The foreign visible supplies are now 250,000,000 lbs.—double what they were a year ago; and in America we have supplies reported by the Copper Producers' Association in excess of 100,000,000 lbs. The invisible supplies—no one knows what they are—might exceed 250,000,000 lbs., and until these are materially reduced there can be no prospect of higher prices. Quotations advanced during March to 13.62½ cts. for electrolytic, declining toward the end of the month to 13.25 cts., and offers were made to sell for export at 13.12½ cts. Lake is relatively much firmer at 13.75 cts. The exports during March amounted to 19,541 tons.

ROOFING COPPER.—Improvement is evident in this branch of trade, not only as far as roofing and cornice copper is concerned, but the manufacturers of brewery supplies and distilling apparatus have been more active than in a long time. The price is 1 ct. higher than last month at 19 cts. base.

LEAD.—The American Smelting & Refining Co., which stubbornly refused to lower its quotation while independent interests were taking the business early in the month, was forced to make, in two successive reductions, quotations $4 per ton lower. The New York price for shipment lead in 50-ton lots is now 4.50 cts. The outside interests are taking business at 4.40 cts. New York. Spring trade is not as promising as was expected.

LEAD PIPE.—The demand shows some improvement. Prices are without change at 5.75 cts. to jobbers and large consumers and 6.40 cts. to small consumers.

SHEET LEAD.—Prices are unchanged at 6.25 cts. to large users and jobbers and 6.75 cts. to the smaller trade.

LEAD WOOL.—The price in New York is without change at 8.25 cts.

SPELTER.—Prices have declined moderately, particularly for prime Western brands which are now obtainable at 5.65 cts. New York, and 5.50 cts. St. Louis, being a decline of approximately $3.00 a ton during the month. Spelter used by brass manufacturers, however, is very firm and rather scarce.

PIG TIN.—The market was extremely dull throughout the early part of the month, but just after the Easter holidays prices advanced sharply as information was then obtainable that the shipments from the East were small. The statistics compiled April 1 by C. Mayer, Secretary of the New York Metal Exchange, showed that, despite an increase of approximately 1,000 tons during the month from the Banka sale, visible supplies had decreased 1,000 tons. This caused a rapid advance and sales were made as high as 33.90 cts. The demand for tin is very good, and some information from the East is to the effect that the Coolies working in the tin mines have abandoned the tin fields for more lucrative employment in the rubber plantations. This would ordinarily be regarded as rather uncertain news, but, knowing the fabulous profits being made by rubber planters, it has every basis for truth.

MISCELLANEOUS METALS.—Small lots of metals and metal products can be obtained from jobbers' stores New York, at the following prices:

	Per lb.
Bismuth	$2.25
Brass tubes, iron pipe sizes:	
½-in.	.19
¾ to 3-in.	.18
3½-in.	.19
4-in.	.20
Brass, sheets	.15¼
Brass, rods	.15¼
Solder, ½ & ½ guaranteed	.22
Zinc sheets	.08½
Manganese bronze rods	.16
Manganese bronze in crucible form	.14
Monel metal, ingot	.16

OLD METALS.—Prices have declined. Miscellaneous lots of scrap metal amounting to about a ton can be sold to dealers in New York at about the following prices:

	Cts. per lb.
Copper, heavy cut and crucible	11.50@11.75
Copper, heavy and wire	11.00@11.25
Copper, light and bottoms	10.00@10.25
Brass, heavy	7.75@ 8.00
Brass, light	6.25@ 6.50
Heavy machine composition	10.25@10.50
Clean brass turnings	7.25@ 7.50
Composition turnings	8.50@ 8.75
Lead, heavy	@ 3.75
Lead, tea	@ 3.50
Zinc scrap	@ 4.00

LUMBER.

Many in the trade were much disturbed early in the month over possibilities of tariff troubles with Canada. This would have had a serious effect on the Northern markets as much of the spruce comes from Canada. This trouble has now been settled.

Business has increased and there is a great deal of activity apparent. Price changes have been numerous and, in the main, toward higher levels. North Carolina roofing boards are up 50 cts. to $1 in Boston; spruce is higher all along the Atlantic seaboard. The prices of all kinds of flooring are from $1 to $2 higher than last month and the demand is said to be very good. Gum is in slightly better demand at a small advance and hickory is being actively sought by the wagon and automobile makers. The outside prices of white ash, at Ohio River points, is $1 higher. In the fancy woods there is little change, although cherry is slightly firmer. The North Carolina pine sawers, in convention last month, complained of the unsatisfactory business. The Harriman roads have made a freight rate reduction which will permit of Pacific coast lumber being shipped to Southwestern points not heretofore supplied by dealers on the coast.

NORTH CAROLINA PINE.—The market is firmer and in some quarters the following prices would be turned down. Other sellers are willing to accept orders at these figures. Prime material, however, is about $15 per M. higher. For pieces 20 ft. long and less, in car lots New York, prices are as follows:

Size.		Size.	
2 × 4 in.	$18	2 × 10 in.	$21
2 × 6 in.	18	2 × 12 in.	22
2 × 8 in.	18		

Roofing boards, either ship lapped or tongue and grooved, are without change from last month, as follows:

Size.		Size.	
13/16 × 5¼ in.	$17.50	13/16 × 9¼ in.	$19.00
13/16 × 7½ in.	18.00	13/16 × 11¼ in.	20.00

Random widths, between any two, take the price of the widest.

In Boston prices are again higher. This is especially noticable in 8-in.; 6-in. roofing boards are quoted at $17.50 to $18.25; 8-in. at $19 to $20; 10-in. $19.50 to $20.50.

LONG LEAF YELLOW PINE.—The volume of business shows some increase, but prices are without change. The stocks in the yards are large, but not too large for the expected trade this year. For delivery from yard, New York and vicinity classed "Merchantable" under the 1905 rules of the Association, prices are as follows:

Price per M. in Yard, New York.

Size.	Length—20 ft. base.	21 to 26 ft.	27 to 30 ft.	31 to 35 ft.
8 in. wide and under by 8 in. thick and under.	$31	$32	$33	$34
10 in. wide by 10 in. thick and under.	33	34	35	36
12 in. wide by 12 in. thick and under.	36	37	38	39
14 in. wide by 14 in. thick and under.	43	44	45	46
16 in. wide by 16 in. thick and under.	45	46	47	48

For pieces longer than 35 ft. and less than 40 ft. add from $4 to $8 to base price.

SPRUCE.—The demand is good. For Canadian and Adirondack spruce $24 to $25 is quoted for 2 × 4-in. to 2 × 8-in.; $26.50 to $27 is asked for 2 × 9-in. and 2 × 10-in. This is $1 higher than last month. This material only comes in lengths of 12 to 14 ft. Quotations for West Virginia spruce are higher and for large lots on track or delivered in the harbor, New York, prices are about as follows:

Size.	*Length, 10 to 20 ft.
2 to 4 in. thick by 4 to 8 in. wide	$28.00 to $29.00
2 to 4 in. thick by 10 to 12 in. wide	29.00 to 30.00
Sizes.	Length, 12 to 16 ft.
1 × 6 to 1 × 10	$29.00

*For each additional ft. in length, over 20 ft., add $1 per M.

In Boston, "Building Orders" are higher at $23.50 in yard. Other prices there, are $21 for 2 × 4-in.; $20 for 2 × 3-in. to 2 × 7-in., and $22 for 2 × 8-in.

SPRUCE BOARDS.—Prices of boards are without any material change, and for Adirondack spruce delivered in car lots, New York, prices are as follows: 1 × 4-in., $24.50; 1 × 5-in., $25; 1 × 6-in. and 1 × 7-in., $25.50; 1 × 8-in., $26; 1 × 9-in., $28.50; 1 × 10-in., $28. Culls, or No. 3, can be had at $20 to $20.50.

Boston prices for "Merchantable" boards 5-in. and wider are $19.50 to $20.

FLOORING.—All flooring is sold at its actual width, but as laid, on account of the tongue and groove, it does not measure the full width. The following prices are for yard delivery of long-leaf yellow pine, the actual measurement being 13/16 × 2¼-in., but counted as 1 × 3-in.; A, sap, $43 to $44.50; A, flat, $31 to $32; common, $25.50 to $26.

FACTORY FLOORING.—Prices of tongue and grooved factory flooring of North Carolina pine from 2 to 4 ins. thick and 5 to 9 ins. wide are unchanged at $19 per M. f. o. b. Norfolk, Va. On cars New York City it can be had for $22 to $23.

MAPLE FLOORING.—Prices are higher. Clear stock with 2-in. face is $48; No. 1 is $39.50 for 2-in.; $41.50 for 2¼-in., and $38 for 3¼-in. Factory flooring of maple ranges from $27 to $34.

OAK FLOORING.—The finest grades of red or white oak, quarter sawed flooring are $90 to $100 per M. in yard New York. Selected, quarter sawed flooring is $55 to $62, selected plain sawed is $48 to $52, and very common oak is $30.

HEMLOCK.—The price of hemlock does not seem to follow the trend observed in other kinds of lumber. The base price of Pennsylvania is $21, and of West Virginia is $20.50. We repeat the quotation of a month ago as follows:

Prices per M. f. o. b. cars New York.

Size.	Length—10 ft.	12 ft.	14 ft.	16 ft.
2 × 4-in.	$23.00	$21.00	$21.00	$23.00
2 × 6-in. to 2 × 10-in.	21.00	21.00	21.00	18 to 20
3 × 4-in. to 12 × 12-in.	21.50	21.50	22.00	19 to 21
1 × 8-in.	....	18.00	18.00	18.00
1 × 10-in. & 1 × 12-in.	....	18.50	18.50	18.50

PILES.—The demand for piles shows some improvement, and, for New York delivery, prices are unchanged from last month, as follows: 60 to 64 ft., $7; 65 to 69 ft., $8; 70 to 74 ft., $9.50; 75 to 79 ft., $11; 80 ft. and longer, $14.

In Norfolk the following prices are named for carload lots of yellow pine piles, in cts. per lin. ft.: 40 to 50 ft. long, 12-in. butt, 7 cts.; 14-in. butt, 9 cts.; 50 to 60 ft. long, 12-in. butt, 8 cts.; 14-in. butt, 9 cts.; 60 to 70 ft. long, 14-in. butt, 10 cts.

Creosoted piles with 8-in. butt are 16 cts. per lin ft., 14 in., butt 26 cts., and 18-in. butt 34 cts.

Oak piles with 14-in. butt, 40 ft. long, are $7.50 to $8; 50-ft. long, $11 to $11.50, and 60 ft. long are $14.50 to $15.

CROSS TIES.—Prices are steady. The following quotations are named for carload lots f. o. b. New York City:

	Cts. each.
7 × 9-in.—8 ft. 6 ins.	80 to 81
7 × 8-in.—8 ft. 6 ins.	78 to 79
7 × 9-in.—8 ft.	78 to 80
6 × 9-in.—8 ft.	74 to 76
6 × 8-in.—8 ft.	68 to 69

In Savannah the shorter lengths are sold at 50 to 53 cts.

POLES.—See Line Construction.

SHINGLES.—Prices are unchanged except for Maine shingles. The following are quoted per M. for cypress shingles, New York City: No. 1 Hearts, 6 × 18-in., $7.50; Primes, 6 × 18-in., $6.50; No. 1 Hearts, 6 × 20-in., $10; Primes, 6 × 20-in., $8. Pine shingles, 2X clear, 6 × 18-in., are $4 and 4X best are $5.25. White cedar can be had at $5 for 16-in. Maine shingles are $3.80 to $4 at mill.

LATH.—Eastern spruce slab lath is $3.75 to $4 per M., New York. The market in Boston is less firm than last month at $3.50 to $3.90.

SIDING.—Heart faced yellow pine siding is $32 to $34.

GUM.—Prices are higher for carload lots, loaded on cars f. o. b. Ohio River points quotations are as follows: Red gum is $32 to $34 for first quality boards and $21 to $23 for common ones.

Sap gum, firsts and seconds, is $21 to $23 for boards less than 12 ins. wide. Common sap gum is $16 to $18.

HICKORY.—With the number of automobiles increasing by leaps and bounds, the manufacturers are becoming anxious about the supply of hickory for the wheels. About 130,000,000 ft. B.M. are used every year for spokes, rims, axles, vehicle woods and other kindred uses, and about 200,000,000 ft. are manufactured into lumber. Hickory comprises only 2 to 5% of the total standing timber in the hardwood forests of the United States. The total mill value of the hickory used in a year in the United States is, according to Washington dispatches, $12,000,000. The market continues quiet and unchanged, as follows: For prime pieces, 1 to 2 ins. thick, wider than 4 ins., $50 to $60; 2¼ to 4 ins. thick, wider than 4 ins., $72 to $80; No. 1 Common, 1 to 2 ins. thick wider than 3 ins., $30 to $40; 2¼ to 4 ins thick, wider than 3 ins., $45 to $55.

BLACK WALNUT.—Furniture manufacturers are about the only buyers at present Prime stuff 1 to 2 in. thick and over 6 ins wide, is held at $95 to $115; No. 1 common 1 to 2 ins. thick and over 4 ins. wide, commands $52 to $65.

MAHOGANY.—Prices of mahogany are unchanged. The best grade of Mexican is $150, second grade, $100 to $110. Cuban is sold at $175.

CHERRY.—The best grade of material, 1 to 2 ins. thick and wider than 6 ins., sells at $90 to $100; No. 1 common, 1 to 2 ins. thick and wider than 4 ins., is sold at $52 to $60.

FREIGHT RATES.—In the following list the carload freight rates on lumber, per 100 lbs., from Ohio River points to the principal cities are as follows: Baltimore, 16 cts.; Boston, 21 cts; Buffalo, 10 cts.; Cleveland, 10 cts.; Detroit, 10 cts.; Indianapolis, 7 cts.; New York City, 19 cts.; Philadelphia, 17 cts.; Pittsburg, 10 cts.; Syracuse, 14 cts.; Toledo, 9 cts. From Norfolk, Va., to New York, 13 cts.; Boston, 15 cts. From Detroit, Mich., to New York, 19½ cts.; to Philadelphia, 17½ cts.

YELLOW POPLAR, ROUGH.

At Mill, Ohio River points.

Thickness.	Classification and width—Prime, 8-in. and over.	Common, 4-in. and over.
1-in.	$54 to $56	$33 to $36
1½—2-in.	55 to 58	35 to 38
3-in.	60 to 64	.....
4-in.	62 to 67	.....

Poplar squares 3 × 3-in., 4 × 4-in., 5 × 5-in., 6 × 6-in., and 7 × 7-in., of good quality are $62 to $67; 8 × 8-in. and larger, when obtainable, are $72 to $77 per M.

CHESTNUT.

At mill, Ohio River points.

Thickness.	Classification and Width—A 1, 6-in. and wider.	Sound Wormy, 3-in. and wider.
1 -in.	$43 to $45	$17.50 to $19
1½-in.	45 to 47	19.50 to 21
2 -in.	46 to 48	20.50 to 22

WHITE ASH.

At mill, Ohio River points.

Thickness.	Classification and width—A 1, 5-in. and over.	Common 3-in. and over.
1-in.	$44 to $48	$30 to $33
1½—2-in.	48 to 53	31 to 34
2½—3-in.	65 to 71	40 to 45
4-in.	70 to 76	40 to 45

Cull boards are $20 to $22 and planks, $23 to $25.

WHITE OAK.

At mill, Ohio River points.

Thickness.	Classification and width—A 1, 6-in. and over.	Common 3-in. and over.
1-in.	$45 to $47	$30 to $32
2—2½-in.	47 to 49	32 to 34

Cull boards are $18 to $21; plank, from $21 to $23.

Quartered oak is from 50 to 66⅔% advance over plain.

GLASS.

SKYLIGHT GLASS.—Some improvement is noted in the volume of business, but the prices of small lots from store are unchanged, as follows:

Thickness, ins.	Price per sq. ft
1/8	7 cts.
3/16	10 cts.
1/4	15 cts.

Wired skylight glass, ¼-in. thick, is 25 cts. per sq. ft.

VAULT LIGHTS.—Some large contracts for vault light work are in prospect and business is fair. The outlook is promising. Prices to contractors furnishing their own molds are unchanged at 4 to 5 cts. per lb. Bull's eyes 3-in. in diameter are 3 cts.; square light, 3½ × 3½-in., are 5 to 6 cts.

WINDOW GLASS.—Business shows a distinct improvement and, by some in the trade, an advance of 5% would not be con-

sidered unlikely. For the present prices are unchanged as follows: The extreme discount to jobbers is 90 and 10% for all sizes of single and double strength. This applies to jobbers' list, Oct. 1, 1903. The net prices per box of 50 sq. ft. at this discount are as follows:

American Window Glass.

Size of Glass, Ins.	Single Thickness. Price per box, 50 sq. ft. A.	B.
6 × 8 to 10 × 15 ... 11 × 14	$2.40	$2.20
12 × 13 to 14 × 20 .. 10 × 26 to 16 × 24 .... 18 × 22	2.52 / 2.70	2.40 / 2.52
20 × 20 to 20 × 30 .. 15 × 36 to 24 × 30 .... 26 × 28 to 24 × 36 .... 26 × 34	2.87 / 2.96 / 3.14	2.64 / 2.70 / 2.79
28 × 32 to 30 × 40 .. 30 × 30 32 × 38	3.47	2.94
34 × 36 to 30 × 50 .. 30 × 52 to 30 × 54	4.00 / 4.27	3.46 / 3.76

PLATE GLASS.—The leading manufacturers of plate glass revised their price list last month and issued a new set of discounts. Radical changes were made in many sizes and it has occasioned considerable stir in the trade since this is the first change in the list made since 1895. For the smaller sizes, prices are practically without change, but for sizes from 50 to 100 sq. ft., prices are about 5% cheaper. Some sizes are very much cheaper, as for example, 17 × 5 ft. is 20% lower than previously. In the extremely large sizes, there has been a slight advance. This includes such sizes as 10 × 13 ft., 9 × 14 ft., and larger. The new discount is 90% from list on all sizes. The price given below is the net cost of the glass, of the size named, the boxing being charged extra. The weight of plate glass is approximately 3½ lbs. per sq. ft.

DUCT TELEPHONE.—The demand continues to improve. Small lots are sold at 4½ to 5 cts. for delivery in New York City, but on desirable orders this figure would be considerably shaded.

FLUE LININGS.—The discount from list f. o. b. mill is 85%, delivered in New York; in small lots, they can be had at 78%. Based on a discount of 85% at the mill net prices are as follows:

	Weight in lbs.	Price per ft.
4½ × 8½-in.	14	$0.04½
4½ × 13-in.	20	.068
4½ × 18-in.	40	.15
6 × 12-in.	22	.075
7 × 7-in.	15	.053
8½ × 8½-in.	18	.068
8½ × 13-in.	28	.098
8½ × 18-in.	45	.135
12 × 16-in.	45	.15
13 × 13-in.	38	.128
13 × 18-in.	57	.18
14 × 16-in.	60	.165
16 × 16-in.	65	.24
16 × 20-in.	80	.30
18 × 18-in.	75	.30

PAVING MATERIAL.

The demand for all kinds of paving material is a great deal better than a month ago, and quotations in general are considerably higher. In Philadelphia a large amount of work is contemplated, and the same is true in the Borough of the Bronx, New York City.

GRANITE BLOCK.—Sellers of granite block report business very good, and numerous contracts have been taken for important work. Prices are firm, and for Cape Ann granite delivered in New York City, the old style of block, $1.60 to $1.75 per sq. yd. is quoted. Dressed block, to lay with a joint not greater than ¼-in., is $2 to $2.10 per sq. yd.

PACKING.—Valve and stuffing box packing is unchanged at the following prices per pound: Asbestos wick and rope, 13 cts.; sheet rubber, 11 to 13 cts.; pure gum rubber, 40 to 45 cts.; red sheet, 40 to 50 cts.; Jenkin's "96" packing, 60 cts.

CHAIN BELTING.—Prices are unchanged, as follows: From 3 HP. to 10 HP., 30-in. centers complete, with two sprockets, $7 to $8 per HP.; from 10 HP. to 25 HP., 36-in. centers complete $5 to $6 per HP.; from 25 HP. to 100 HP., 60-in. centers complete, $4 to $5 per HP.; from 100 HP. to 500 HP., 72-in. centers complete, $3 to $4 per HP.

The following prices of leather belting are based on the discounts given above:

LEATHER BELTING, PRICE PER FT.

Width, ins.	Extra heavy.	Heavy.	Light.
1	$0.11	$0.096	$0.078
1½	.162	.144	.117
2	.215	.172	.156
2½	.27	.24	.195
3	.325	.288	.235
3½	.38	.337	.275
4	.435	.385	.31
5	.54	.48	.39
6	.65	.58	.465
7	.76	.675	.55
8	.87	.78	.62
9	.97	.86	.70
10	1.08	.96	.78
11	1.20	1.06	.85
12	1.30	1.15	.94
14	1.52	1.35	1.09
16	1.73	1.53	1.28
18	1.95	1.73	1.40
20	2.16	1.92	1.56
22	2.37	2.10	1.72
24	2.60	2.30	1.87
26	2.82	2.50	2.05
30	3.25	2.90	2.33
36	3.92	3.45	2.82
48	5.00	4.60	3.75

NET PRICES OF POLISHED PLATE GLASS IN DOLLARS.

Length, Feet.	Width, Feet 1	1.5	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10
1	0.27	0.42	0.55	0.73	0.95	1.14	1.30	1.51	1.68	2.64	3.15	3.60	4.14	4.60
1.5	....	0.66	0.95	1.20	1.58	2.31	2.64	3.04	3.38	4.14	4.83	5.52	6.28	7.05
2	....	....	1.30	1.75	2.64	3.15	3.60	4.14	4.60	5.52	6.51	7.52	8.64	9.80
2.5	....	....	....	2.82	3.38	4.03	4.60	5.18	5.82	7.05	8.40	9.80	11.10	12.30
3	....	....	....	....	4.14	4.83	5.52	6.28	7.05	8.64	10.30	11.80	13.50	15.00
3.5	....	....	....	....	....	5.70	6.51	7.41	8.40	10.30	12.10	14.00	15.80	17.50
4	....	....	....	....	....	....	7.52	6.64	9.80	11.80	14.00	16.00	18.00	20.00
4.5	....	....	....	....	....	....	....	9.93	11.10	13.50	15.80	18.00	20.30	22.50
5	....	....	....	....	....	....	....	....	12.30	15.00	17.50	20.00	22.50	25.00
6	....	....	....	....	....	....	....	....	....	18.00	21.00	24.00	27.00	30.00
7	....	....	....	....	....	....	....	....	....	....	24.50	28.00	32.20	35.70
8	....	....	....	....	....	....	....	....	....	....	....	32.70	36.80	42.00
9	....	....	....	....	....	....	....	....	....	....	....	....	41.80	46.40
10	....	....	....	....	....	....	....	....	....	....	....	....	....	52.50
11	5.06	7.92	10.50	13.80	16.50	19.30	22.00	24.80	28.10	33.70	39.70	45.40	52.00	71.50
12	5.52	8.64	11.80	15.00	18.00	21.00	24.00	27.00	30.60	36.80	43.30	50.40	70.20	78.00
13	6.05	9.56	13.00	16.30	19.50	22.80	26.60	29.90	33.20	40.20	47.80	67.60	76.10	123.50
14	6.51	10.30	14.00	17.50	21.00	24.50	28.60	32.20	35.70	43.30	51.50	72.80	119.70	161.00
15	....	....	....	....	....	26.80	30.60	34.50	38.30	46.40	68.30	78.00	155.30	180.00
16	....	....	....	....	....	36.40	41.60	46.80	52.00	62.40	72.80	121.60	172.80	224.00
17	....	....	....	....	....	38.70	44.20	49.80	55.30	66.30	77.40	156.40	214.20	323.00
18	....	....	....	....	....	41.00	46.80	52.70	58.50	70.20	119.70	172.80	307.80	342.00

CLAY PRODUCTS.

SEWER PIPE.—A marked improvement is noted in this trade. Inquiries are coming in from all parts of the country, but owing to the large stocks in the hands of manufacturers there is no scarcity or change in price. The discounts from the "Eastern List" for standard sewer pipe are, 83% for sizes up to 24-in.; 78% for 27 and 30-in.; 73% for 33 and 36-in. At these discounts the net price per ft. for carload lots f. o. b. factory are as follows:

2 & 3-in.	$0.027	18-in.	$0.289
4-in.	.034	20-in.	.382
5-in.	.042	21-in.	.425
6-in.	.051	22-in.	.468
8-in.	.085	24-in.	.715
9-in.	.102	27-in.	.93
10-in.	.128	30-in.	1.21
12-in.	.17	33-in.	1.69
15-in.	.23	36-in.	1.89

HOLLOW WALL TILE.—Business is better. Quotations are unchanged from last month. For hollow wall building tile, f. o. b. factory, Perth Amboy, N. J., prices are as follows:

	Price per block, in cts.
4 × 12 × 12-in.	5.25
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	8.9
10 × 12 × 12-in.	10.5
12 × 12 × 12-in.	12.1

Fireproofing partition blocks are unchanged as follows:

	Price per block, in cts.
2 × 12 × 12-in.	4.4
3 × 12 × 12-in.	4.4
4 × 12 × 12-in.	5.
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	8.8

These prices are for what would be considered small orders—approximately carload lots. For quantities which exceed $1,000 worth of material, concessions will be made.

ROOFING TILE.—As in other lines, trade is better. Prices continue without change. The best grade of promenade roofing tile in flat blocks for high grade roofs is sold at $20 per M. for run of kiln and $30 per M. for selected. A cheaper form of tile with a smooth face can be had at $10 to $12, but it is not suitable for roof gardens. These prices are for 9 × 9 blocks f. o. b. factory. It requires 288 blocks to lay 100 sq. ft. of roof surface and, in consequence, the price per 100 sq. ft. of roof surface would be $4 to $5 for the smooth blocks; $7.82 for the run of kiln, and $10.73 for the selected.

Vitrified tile unglazed, of the French or Spanish type, is sold at approximately $8.50 per 100 sq. ft. of roof surface f. o. b. factory. Glass tiles are sold at 60 cts. each. It requires 183 of these for 100 sq. ft. of roofing.

ASPHALTUM.—An improvement in the demand is noted, and prices are somewhat firmer. Refined Trinidad asphaltum is $25 per net ton, and waterproofing $27 per net ton. These prices are for the best grades, and concessions of at least $3 per ton can be obtained when cheaper grades are purchased. California asphaltum is $28 to $30 per net ton f. o. b. New York, and $16 to $19 at point of shipment.

ROAD OILS.—It is expected that more business will be placed for road oil this season than ever before. Prices are somewhat firmer, 30% asphaltum oil being quoted at 4 cts. per gal.; Texico macadam asphalt, 90% to 95%, is 1 ct. higher at 11 cts. per gal. in bulk, f. o. b. New York or Philadelphia. A or X tarvia in barrels is 8½ to 9¼ cts. per gal.; B grades in barrels is 7 to 8 cts. per gal.

PAVING BLOCKS, WOOD.—A feature of the business is the number of small orders being received practically without solicitation. The demand is excellent. Quotations are higher, and for long leaf yellow pine blocks, having not less than 20 lbs. of oil per cu. ft., prices per sq. yd., f. o. b. New York are as follows: 3 ins. thick, $1.85; 3½ ins. thick, $2.05; 4 ins. thick, $2.25. For large orders, concessions might be obtained.

VITRIFIED BRICK.—The price per sq. yd. for both brick and block average 55 cts. to 65 cts. f. o. b. point of shipment. It costs about 50 cts. per sq. yd. to deliver carload lots in New York and in New England states, and from 25 cts. to 50 cts. in Ohio, Pennsylvania, Indiana and Illinois.

MILL SUPPLIES.

SHAFTING.—Specifications on old contracts continue to come in freely and there is considerable new business coming up. Prices are unchanged at 55% discount for carload lots and 50% discount for less than carloads. The following net prices per foot are based on the 50% discount: ¾-in., 4.15 cts.; 1-in., 7.30 cts.; 1¼-in., 11.50 cts.; 1¼-in., 15 cts.; 1⅝-in., 20.50 cts., 2-in. 25.50 cts.; 2¼-in., 38.75 cts.; 2½-in., 41.75 cts.; 2⅝-in., 50 cts.; 3-in., 60 cts.; 3¼-in., 90 cts.; 4-in., $1.27½; 4½-in., $1.78; 5-in., $2.35; 5¼-in., $3; 6-in., $3.85.

BELTING.—Prices are without change, but the demand is excellent. The cost of raw materials is higher, rubber now being somewhat of a speculative football. In leather there is a shortage of hides, but prices are only slightly higher. The net prices of rubber belting were given on page 88 in the issue of Feb. 3. Prices continue without change, the discounts on rubber belting being as follows: Competition, 70 and 10%; standard, 60 and 10%; best grades, 50 and 10%.

The discounts for both single and double leather belting are unchanged from a month ago: Extra heavy, 55%; heavy, 60%; medium, 60 and 10%; light, 60, 10 and 10%; shoulder, 75%; standard, 70 and 10%.

LUBRICATING OILS.—Business is not as good as many hoped it would be at this time. While there is a fair run of orders from regular buyers trade as a whole seems to lack snap. In general, the following prices prevail to large consumers of approved credit who buy in 5-bbl. lots or larger:

	Cts. per gal.
*Cylinder, light filtered	23 to 32
*Cylinder, dark	20 to 27
*Cylinder, steam refined	14 to 22
Neutral Oils, filtered:	
Stainless white, 32 to 34 gravity	28 to 29
Lemon, 33 to 34 gravity	17 to 19
Dark, 32 gravity	15 to 18
Crank case oil	15 to 17

*Prices vary according to test.

GRAPHITE LUBRICANTS.—The prices, per pound, in barrel lots, to the small consumers are given as follows: Engine flake graphite, 12 cts.; oiled graphite, 20 cts.; car box grease, 8 cts.; gear grease, for electric cars, 4¼ cts.; cup grease, 15 cts.; axle grease, 8½ cts.; automobile graphite grease, 16 cts.

Large consumers and jobbers can obtain considerable concession from these figures.

FIRE HOSE.—The standard grade of underwriter's cotton rubber-lined hose, ¾ ins. in diameter, warranted 350 lbs. pressure, is sold in 50-ft. lengths, complete with couplings, at 65 cts. per ft. Common hose, 2½ ins. in diameter, tested to 200 lbs. pressure, is 35 cts. per ft.

COTTON WASTE.—The rapid advance in price late last year has caused a curtailment in the demand for waste. Prices are without change from last month at 9 to 10 cts. per lb.

HIGH SPEED STEEL.—The demand is only fair. The better known brands command 65 cts., but the largest users obtain concessions from this figure.

OILS AND PAINTS.

PETROLEUM PRODUCTS.—Prices continue without change. The Standard Oil Company gives the price of crude oil in bbls. at the wells as follows: Pennsylvania, second sand, and Tiona, $1.40; Mercer black, 90 cts.; Corning, 79 cts.; New Castle, 87 cts.; North Lima, 84 cts.; Indiana, 79 cts.; Illinois, 60 cts.; heavy, below 30 gravity, 52 cts. In the local market petroleum from tank wagon delivery is 8¼ cts.; auto-naphtha and stove gasoline, 13¾ cts.

Fuel oil in tank cars is quoted at 95 cts. to $1.05 per bbl. of 42 gals. at seaboard points.

The Atchison purchased about 4,000,000 bbls. late last month. This is the largest contract taken in some time.

LINSEED OIL.—Prices advanced 5 cts. per gal. April 1, and city raw is now quoted at 82 to 93 cts. per gal. Out-of-town raw is 81 to 82 cts. per gal. Ca[illegible] is likewise higher at 90 cts. per [illegible] advance is the result of higher [illegible] flaxseed, now selling at practical[illegible] prices. Sales have been made as [illegible] $2.27½ per bu. in Duluth, compa[illegible] $1.65 four months ago and the u[illegible] of from $1 to $1.25. The scar[illegible] been so marked that 35,000,000 bu[illegible] seed from Argentine have been [illegible] this season. Some in the trade [illegible] prices may go even higher.

SPIRITS TURPENTINE.—The d[illegible] very good and prices are stead[illegible] practically without change from las[illegible] In 5-bbl. lots spirits can be had [illegible] 63½ cts. per gal. In Savannah, [illegible] quoted at 59½ cts. and in Charlest[illegible] 60 cts.

PAINTS.—The demand for all [illegible] paint continues to improve. Trade [illegible] active, and the high prices have [illegible] terred operations as yet. Standard [illegible] of mixed paints are from 15 to 2[illegible] gal. higher than last year, and the [illegible] facturers have ceased taking orders [illegible] old prices.

Prices of white lead and oil [illegible] changed. For lots of 500 lbs. or [illegible] 100, 250 and 500-lb. kegs, 7¼ cts. [illegible] is quoted, in 25 and 50-lb. kegs, [illegible] per lb. Red lead and litharge in bbl[illegible] bbls. and 100-lb. kegs is 7¼ cts. p[illegible] lb.

Brown metallic is quoted at $16.50 [illegible] per ton; red metallic, $14 to $18 p[illegible] ton. American Venetian red in ton lots or [illegible] is 75 cts. to $1.25 per 100 lbs., and E[illegible] Venetian red, $1.15 to $1.60 per 10[illegible] lbs. Graphite bridge paints are in excell[illegible] demand at prices ranging from $1.10 to $1.25 for standard brands. It is rumored that prices might work higher later in the season. Hydrex preservative paint is 7[illegible] cts. per gal. in barrel lots, New York City.

LINE CONSTRUCTION.

TELEGRAPH WIRE.—While there is considerable work in prospect and the current orders are fair still there is no boom. Prices are unchanged, the inside one being for ordinary steel while the outside price is for extra best steel. The sizes are in Birmingham wire gage and the price in cts. per lb. Nos. 6 to 9 is 4¾ cts.; Nos. 10 to 11, 5 to 4½ cts.; No. 12, 3¼ to 4¾ cts.; No. 14, 3¾ to 5¼ cts. Actual freight is allowed from point of manufacture, Trenton, N. J., when it does not exceed 25 cts. per 100 lbs.

COPPER WIRE.—Prices are less firm than last month. The asking quotation is 15 cts., but whether any business has been taken at that figure or not is a question. It is known, however, that orders have been placed at 14.75 cts. and without doubt some manufacturers would not refuse a desirable order at even less. This is the base price for No. 8 wire. Grooved trolley wire is held at an advance of 0.25 cts. per lb. over the base price. A more comprehensive statement of conditions in the copper market will be found in the review of that market under the heading "Metals."

ALUMINUM.—A large order for aluminum wire was taken by the Canadian works last month. The price is without change at 31 cts. base.

INSULATORS.—Glass insulators in lots of more than 1,000 and less than 10,000 are sold at the following prices per 1,000: Double petticoat 20 oz., $33; Western Union, $30.25; No. 2 cable, $53.90; No. 4 cable, $210; Muncie type, 7-in., $236.50; No. 3 triple petticoat, 4½-in., $90.75.

POLES.—A slight readjustment is noted in the shorter lengths. White cedar poles f. o. b. Rex, Mich., freight rate to Chicago 12 cts., are quoted by the Backus-Judd Lumber & Cooperage Co., Minneapolis, Minn., as follows:

Length in feet.	Price each. Diameter at top—6-in.	7-in.
25	$0.60	$1.00	$1.50
30	....	1.55	3.50
35	....	3.75	5.00
40	....	5.25	7.00
45	....	7.25	9.50
50	....	10.00	11.00

Cedar poles shipped from the state of Washington are quoted by R. E. Dowie Pole Company, 432 New York Block, Seattle, Wash., as follows:

Length in ft.	Diamster at top.	Price each.
30	8-in.	$2.40
35	8-in.	2.80
40	8-in.	3.20
45	9-in.	4.50
50	9-in.	5.00
55	9-in.	5.50
60	9-in.	6.00
65	9-in.	9.75
70	9-in.	10.50
75	9-in.	11.25
80	9-in.	12.00

Chestnut poles, f. o. b. Mechanicville, N. Y., are quoted by T. C. Luther of that place as follows:

Length in feet.	Price each. Diameter at top—5-in.	6-in.	7-in.
25	$1.50	$2.00	$2.75
30	2.50	2.75	3.25
35	2.75	3.25	4.00
40	3.25	4.00	5.50
45	4.00	5.50	7.50
50	5.50	7.50	9.50

FIR CROSS ARMS.—Prices are unchanged since the last report and are represented by the following quotations:

Size, 3¼ / 4¼ in.	Price per arm in cts. Pacific Coast.	Chicago.	New York.
3 ft., 2-pin.	8	13¼	15½
4 ft., 4-pin.	11	18¼	21
5 ft., 4-pin.	16	27½	32½
6 ft., 4 and 6-pin.	20¼	31¼	36
8 ft., 6 and 8-pin.	28	43	48½
10 ft., 8, 10 and 12-pin.	37	55½	67½

DRAFT ANIMALS.

HORSES.—Prices for all classes of horses continue high. Good animals fresh from the farm bring high figures and old horses, that have seen years of service, are also sold at high prices. At an auction held in New York last month some of the prices were as follows:

A work horse, 7 years old, guaranteed kind and gentle, weighing 1,100 lbs., brought $160; another, 11 years old, weighing 1,000 to 1,100 lbs., brought $157.50. A rather spirited delivery horse of good appearance, 10 years old, weighing not over 1,000 lbs., brought $172.50; another one 8 years old, weighing 1,100 lbs., a good dray or truck horse, brought $172.50; a 7-year-old, 1,200-lb chunky horse sold at $160.

Several horses fresh from the country, of excellent appearance and under 7 years old, were sold as follows: One weighing 1,100 lbs., not exceptionally well broke, brought $155; one weighing less than 1,000 lbs., brought $150, and a very good truck horse, rapid walker and clean cut, in all appearances standing 16 hands high and weighing 1,200 to 1,300 lbs., brought $245; another one, younger, but about the same weight, brought $225, and a good horse, 1,200 lbs., 16 hands high, brought $212.50. One of not very prepossessing appearance, 16 hands high and weighing 1,300 lbs., was sold at $200. A fine matched team of sorrels, weighing 2,600 to 2,800 lbs., well matched and of excellent appearance, brought $540 for the pair. A chunky truck horse, which had evidently been overworked, but which with good treatment would probably weigh 1,400 lbs., brought $170. One 10 years old, weighing 1,100, a fair horse, was sold at $140.

Several rather poor horses which had been worked hard during the winter were sold without guarantee and one, a 15-year-old grey, weighing 1,000 lbs., brought $110; one 14 years old, weighing fully 1,200 lbs., and standing 16 hands, brought $132.50. A scrub horse weighing probably 1,100 to 1,200 lbs., was sold for $85, and several horses of decidedly poor grade and over 12 years old were sold at $65 to $85 each.

HEATING SUPPLIES.

As a general rule the price of heating supplies do not fluctuate much, yet at times there is keen competition for business. On such occasions many classes of supplies are sold far below normal and in some cases lower than the cost of manufacture. This applies more especially to the steam and hot water heating trades, as the furnace business is almost always done at a close margain. Prices now are about normal.

FURNACES.—The demand is good, especially for such furnaces as are used in the cheaper class of dwellings. It is somewhat difficult to give a classification of furnaces that will meet all conditions, but in the following lists the principal types are given. These prices are f. o. b. foundry and are subject to a slight variation. In many cases the price could be slightly shaded, especially for carload lots. The rated capacity is given in cubic feet of space heated. The following prices are for furnaces of the portable type.

Competitive Grade, Cast Radiator.

Diameter of fire pot.	Rated capacity cu. ft.	Price with casings.
20 in.	10,000 to 12,000	$42
23 in.	16,000 to 18,000	49
26 in.	20,000 to 23,000	61
30 in.	25,000 to 35,000	85

Competitive Grade, Steel Radiator.

Diameter of fire pot.	Rated capacity cu. ft.	Price with casings.
18 in.	8,000 to 10,000	$33
20 in.	11,000 to 13,000	39
23 in.	16,000 to 18,000	46
26 in.	20,000 to 23,000	58
30 in.	25,000 to 35,000	80

Fair Grade, Steel Radiator.

Diameter of fire pot.	Rated capacity cu. ft.	Price with casings.
18 in.	9,000 to 11,000	$40
20 in.	13,000 to 15,000	56
23 in.	18,000 to 20,000	54
26 in.	23,000 to 26,000	67
30 in.	26,000 to 35,000	88

Generator Type.

Diameter of fire pot.	Rated capacity cu. ft.	Price with casings.
19 in.	15,000 to 25,000	$85
22 in.	25,000 to 45,000	102
25 in.	45,000 to 60,000	117
30 in.	60,000 to 100,000	160

PIPES AND ELBOWS.—To obtain the following prices contractors would have to purchase not less than $100 worth of fittings at one time:

Diameter, ins.	Tin pipe, price per ft. cts.	Adjustable Elbows, each. Tin, cts.	No. 26 Galvanized Iron, cts.
6	8	9	11½
7	9	11	14
8	10	14	19
9	11	17	21
10	12	19½	28½
11	13	25	32½
12	14	29	39
13	15	35	44
14	18	45	50
16	20	60	78

Galvanized Iron Smoke Pipe, Riveted.

	6 in.	7 in.	8 in.	9 in.	10 in.	11 in.
24 Gage..	10	11½	14	15	18	20
26 Gage..	9½	10½	12½	14	16½	19
28 Gage..	9	9	11¼	13	15	17½

Floor Register Boxes, Tin.

Size of Box.	Price, each.
6 × 8 and 6 × 10-in.	$0.40
8 × 8 and 8 × 10-in.	.45
8 × 12-in.	.50
9 × 12 and 10 × 12-in.	.55
10 × 10-in.	.60
10 × 16 and 12 × 14-in.	.65
12 × 18-in.	.75
12 × 20 and 14 × 18-in.	.80
14 × 22 and 16 × 20-in.	.90
18 × 24-in.	1.00

Wall Register Boxes.

These boxes are 4 ins. deep, have 4-in. collars and 1-in. flanges.

Size of Opening.	Price, each.
6 × 8, 6 × 10 and 8 × 10-in.	$0.45
8 × 12-in.	.55
9 × 12 and 10 × 12-in.	.60
10 × 14-in.	.65
10 × 16-in.	.70

OFFSETS.—Tin offsets are used to make connections between round and oval pipes. Prices are as follows: 7-in. pipe, 60 cts.; 8-in. pipe, 60 to 70 cts.; 9-in. pipe, 65 to 70 cts.; 10-in. pipe, 70 to 75 cts.; 12-in. pipe, 70 cts.

Oval Hot Air Pipe.

Size.	Price per ft.
3 × 8-in.	$0.10
3 × 10-in.	.11
3 × 12-in.	.12
3½ × 10-in.	.11
3½ × 12-in.	.12
4 × 8-in.	.10
4 × 10-in.	.11
4 × 12-in.	.13
4 × 14-in.	.14
4 × 16-in.	.16

Rectangular Hot Air Pipe.

Size.	Price per ft.
3 × 8-in.	$0.10
3 × 10-in.	.12
4 × 8-in.	.11
4 × 10-in.	.12
4 × 12-in.	.13
4 × 14-in.	.14
5 × 8-in.	.12
5 × 10-in.	.13
6 × 8-in.	.12
6 × 10-in.	.13

REGISTERS.—A great variety of sizes and styles of registers are made and to give the net prices of all would occupy too much space. They are all sold at a discount of 66⅔% to 70% from list. The list is printed in the building pocket-books, or it may be obtained from the manufacturers. The net prices of the sizes of black japanned registers in most general use are as follows:

Size of Opening.	Price, each— Register.	Border.
6 × 10-in.	$0.48	$0.36
8 × 10-in	.50	.38
8 × 12-in.	.57	.45
8 × 14-in.	.90	.60
9 × 12-in.	.63	.50
10 × 12-in.	.72	.53
10 × 14-in.	.95	.66
12 × 14-in.	1.30	.84
12 × 16-in.	1.66	1.03
14 × 16-in.	2.55	1.30
14 × 18-in.	2.70	1.36
16 × 20-in.	4.00	1.83
18 × 20-in.	5.85	2.30
18 × 24-in.	6.50	2.50

ASBESTOS PAPER.—The prices of asbestos paper are given in the Miscellaneous column in the last part of this report.

STEAM AND HOT WATER.—In the following lists are given the net prices of boilers f. o. b. foundry or warehouse. These ratings are those used in actual work, but it is a generally accepted rule to use a boiler with 20% additional capacity. The price includes fire tools and, for steam boilers, gages.

Steam Boilers.

Rated capacity, sq. ft. radiating surface.	Actual grate area, sq. ft.	Net cost f. o. b. warehouse.
300	1.95	$52.00
425	2.60	69.00
550	3.25	81.00
600	3.32	86.00
750	4.15	107.00
800	4.08	112.00
900	4.98	122.00
1,000	5.10	132.00
1,100	5.44	142.00
1,200	6.12	152.00
1,300	6.24	162.00
1,350	6.80	167.00
1,600	8.16	192.00
1,625	7.80	194.00
1,850	9.52	217.00
1,950	9.36	237.00
2,100	9.12	242.00
2,275	10.92	258.00
2,625	11.40	279.00
3,150	13.68	317.00
3,675	15.96	355.00
4,200	18.24	390.00
4,750	18.00	426.00
5,700	21.60	486.00
6,650	25.20	555.00
7,650	28.80	617.00
8,550	32.40	678.00

Hot Water Boilers.

Rated capacity, sq. ft. radiating surface.	Actual grate area, sq. ft.	Net cost f. o. b. warehouse.
500	1.95	$49.00
700	2.60	66.00
800	3.25	78.00
1,000	3.32	82.00
1,250	4.15	104.00
1,300	4.98	119.00
1,500	4.08	100.00
1,650	5.10	128.00
1,825	5.44	139.00
2,000	6.12	148.00
2,150	6.24	159.00
2,225	6.80	163.00
2,650	8.16	188.00
2,675	7.80	190.00
3,050	9.52	213.00
3,200	9.36	223.00
3,450	9.12	234.00
3,725	10.92	250.00
4,325	11.40	272.00
5,200	13.68	310.00
6,050	15.96	348.00
6,925	18.24	386.00
7,825	18.00	420.00
9,400	21.60	483.00
10,975	25.20	545.00
12,550	28.80	610.00
14,125	32.40	670.00

RADIATION.—The price of radiation is the most variable in the line of heating supplies. At times a desirable order will be taken at marked concessions from the usual figure. The present price of standard 38-in. hot water radiation is 18 cts. per ft.; steam, 17.65 cts.

PIPE.—The mill prices of merchant pipe are given in another part of this report under the heading Iron and Steel. Prices for pipe from store would be about 20% advance over these figures.

RADIATOR VALVES.

Quick Opening Hot Water With Union.

Size.	Price, each— Rough body plated trimmings.	Finished body plated all over.
½-in.	$0.69	$0.87
¾-in.	.78	1.02
1 -in.	1.00	1.29
1¼-in.	1.47	1.94
1½-in.	1.98	2.43
2 -in.	3.08	3.72

Union Elbows.

½-in.	$0.51	$0.69
¾-in.	.57	.72
1 -in.	.72	.90
1¼-in.	.93	1.17
1½-in.	1.17	1.47
2 -in.	1.86	2.55

Screw Stem Steam, With Union.

Size.	Price, each— Rough body plated all over.	Finished body plated all over.
½-in.	$0.96	$1.11
¾-in.	1.14	1.29
1 -in.	1.44	1.59
1¼-in.	1.92	2.10
1½-in.	2.43	2.79
2 -in.	3.93	4.32

PIPE COVERINGS.—The price given in the accompanying table are for coverings designed especially for low pressure work. These prices are not the lowest quoted, but represent the minimum for ordinary sized lots. The market is rather firm with advancing tendencies.

Asbestos Pipe Covering.

Size.	Price per foot.— Air Cell, ½ to 2-in. thick.	Sectional, ¾-in. thick.
½-in.	$0.044	$0.07
¾-in.	.048	.08
1 -in.	.054	.09
1¼-in.	.06	.10
1½-in.	.066	.11
2 -in.	.072	.12
2½-in.	.08	.13
3 -in.	.09	.15
3½-in.	.10	.17
4 -in.	.13	.22
5 -in.	.14	.23
6 -in.	.16	.27

The price of coverings for elbows is about the same as the cost of 1¼ ft. of pipe coverings for the sizes up to and including 5 ins.

STEEL PLATE FANS.—The following prices are not the lowest named, but represent the figures which are quoted to general consumers.

Size of Wheel, ins. Diameter.	Width of periphery.	Price.
16	6¾	$25.00
19	7¾	32.50
22	8¾	42.00
25	9¾	52.00
28	10¾	66.50
31	12¾	75.00
38	14½	85.00
42	17¼	115.00
48	18¾	137.50
54	21	165.00
60	23¾	192.50
66	26	215.00
72	29¾	250.00
84	34¾	330.00
96	38¾	430.00
108	42¾	575.00
120	47	725.00
132	51½	900.00
144	56	1,080.00

MISCELLANEOUS.

PAPER.—A very fair demand exists for all kinds of paper, but manufacturers and jobbers have ample stocks at their disposal to meet present requirements. Prices are practically without change from a month ago, as follows:

	Per roll of 108 sq. ft.
Tarred Paper:	
Standard 2-ply, 40 lbs.	$0.45
Extra heavy 2-ply, 45 lbs.	.55
Standard 3-ply, 60 lbs.	.65
Extra heavy 3-ply, 70 lbs.	.75
	Per roll of 500 sq. ft.
Rozin Sized Sheathing:	
Light, 35 lbs.	$0.38
Medium, 30 lbs.	.45
Heavy, 40 lbs.	.60

PITCH.—Roofing pitch of the best grade is sold by the manufacturers at $14 to $15 per net ton delivered New York City. In the report last month under this heading there was an error, the price being stated "per 100 tons," which was intended per net ton.

ROOFING CEMENT.—The best grades of roofing cement are without change, Texaco is quoted at $25 per ton.

OAKUM.—With the opening of navigation there is always a better demand for oakum and this will undoubtedly continue during the next two months. Prices continue unchanged, as follows: Best grade, 6¼ cts.; U. S. Navy, 5¾ cts.; common or plumbers' oakum, 2¼ cts. per lb.

ROPE.—Only slight changes have been made in the price of rope, but the demand is very good. The best grade of pure Manila is 8 cts.; second grade, 7½ cts., and competitive grades, 7¼ cts. A slight advance is noted in the price of pure Sisal, which is now quoted at 7¾ cts.; second grade is 6 cts. per lb. Jute rope in commercial sizes is 5 to 5½ cts. per lb.

ROOFING SLATE.—Trade shows some improvement, there being a very fair demand for slate for small buildings. Stocks are not large and should any increased demand spring up there will be probably an advance in price. The following quotations are per "square" or one hundred sq. ft. of roof surface in carload lots f. o. b. quarry stations of the size in most general use.

	Per 100 sq. ft.
Vermont, sea green	$4.00 to $4.50
Pennsylvania, Bangor Ribbon	4.00 to 4.50
Maine, Brownsville No. 1	6.00 to 7.75
Maine, Brownsville No. 2	5.60 to 6.00
Red	10.50 to 12.25
Unfading green	4.50 to 5.00
Genuine Bangor	5.00 to 6.50

RUBBER.—The making of new high records in the price of rubber are getting to be a daily occurrence. In London, the principal market, the speculation in rubber shares and the exploitation of new rubber plantations is amounting to a craze. It has affected the financial situation and is causing considerable unrest. The movement is nearly all speculative, however, and in this country the importers declare: "Buying is at a standstill. Consumers will not buy except for actual wants and we are advising our customers to stay out of the market."

The quotations prevailing for the raw product are on such a high level that they would cause a general readjustment of prices in hose, belting and kindred products if manufacturers of those supplies should have to base their selling prices on the cost of raw material. Upriver fine para, which sold as low as $1.22 early last year, advancing to $1.80 by the end of December is now quoted at $2.40. The advance in Upriver coarse para, which is now selling at $1.60, has been as rapid. Island coarse has nearly doubled, for it now sells at $1, compared with 58 cts. last year. Caucho ball is now quoted at $1.70. Those conversant with the situation look for lower prices.

WATERPROOFING.—The prices for carload lots, f. o. b. cars New York, are as follows: Hydrex waterproofing felt, $1.25 per 100 sq. ft.; Hydrex compound "A," 26 cts. per gal.; Hydrex compound "B," 18 cts. per gal.

Texaco waterproofing cement is $30 per ton, in car lots, f. o. b. cars New York or Philadelphia.

Asphaltum, for waterproofing, is sold at $25 to $27 per net ton.

VAULT LIGHTS.—See Glass.

EXPLOSIVES.—Dynamite, of the kind usually used by contractors, is approximately 11 to 13 cts. per lb. f. o. b. factory in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20 to $1.40 per keg or 25 lbs. in lots of 10,000 lbs. The following prices prevail on Trojan, in carload lots, minimum 24,000 lbs., f. o. b. Pacific Coast points: No. 1, 13½ cts.; No. 2, 10½ cts.; No. 3, 10 cts. They have a disruptive force equivalent to 60%, 40% and 30% of nitro-glycerine.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft. $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 24 ft., $9.40; 30 ft., $12; 36 ft., $14.60.

Caps in lots of 10,000 are $7 to $8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

LIGHTERAGE LIMITS.—The free delivery or "Lighterage Limits" in New York City are as follows: In Manhattan, from a point opposite the Fort Lee ferry south along the Hudson River around the Battery and north along the East and Harlem rivers to the Jerome Ave. bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City; points on the north and east shore of Staten Island between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Eristina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Pot Cove, Astoria, Long Island City.

ASBESTOS PRODUCTS.—The demand is good and prices are unchanged. Asbestos building felt and sheathing in less than ton lots is 3½ cts. per lb. for the light, weighing from 6 to 30 lbs. per 100 sq. ft.; 4 cts. per lb. is charged for the heavy, weighing from 45 to 56 lbs. per 100 sq. ft.

Mill board is made in standard sheets, 40 × 40 ins., and 42 × 44 ins. It varies in thickness from 1/32 to ½-in. and in weight from 2 to 27 lbs. per sheet. The net price in 100-lb. lots is 5 cts. per lb.

Transite, asbestos wood, used for fireproofing, ventilators and smoke jacks, comes in standard sheets, 36 × 48 ins., 42 × 48 ins., and 42 × 96 ins. The prices f. o. b. factory, Nassau, N. H., are as follows:

Thickness.	Weight.	Price.
¼-inch	1 lb.	$0.08
3/16-inch	1½ lbs.	.12
⅛-inch	2 lbs.	.16
5/16-inch	2½ lbs.	.20
⅜-inch	3 lbs.	.24
7/16-inch	3½ lbs.	.28
½-inch	4 lbs.	.32
9/16-inch	4½ lbs.	.36
⅝-inch	5 lbs.	.40
¾-inch	6 lbs.	.44
⅞-inch	7 lbs.	.48
1 inch	8 lbs.	.52
1¼ inches	10 lbs.	.56
1½ inches	12 lbs.	.64
1¾ inches	14 lbs.	.72
2 inches	16 lbs.	.80

THE WESTERN ENGINEERING & CONSTRUCTION CO., McPherson, Kan., has recently been incorporated. This company will do a general engineering and construction business, making industrial and technical reports and acting as a financial agent. Considerable work will probably be done in the electric railway field. The President is D. H. Brant. The Vice-President, Francis B. Morgan, formerly of Cleveland, was President of the Cleveland, Sherron Electric Railway Co., and interested in several other electric roads. He has had a long and varied experience in financial affairs connected with railroad work. H. A. Roland the Treasurer is the consulting engineer of the firm; and is also the County Surveyor of McPherson County, and City Engineer of McPherson. The company contemplates the establishment of branch offices in Cleveland and New York.

TRADE PUBLICATIONS.

STEEL ROD BENDING MACHINE.— Kardoug Bros., Minneapolis, Minn. Paper; 6 × 9 ins.; pp. 4; illustrated.

This machine is operated by hand and is used for bending to any desired shape the steel rods used in reinforced-concrete construction. It will handle rods up to 1½ ins., bending to any angle or forming loops or eyes. It is mounted on a four-wheeled wagon bed and weighs about 1,800 lbs. complete.

PUMPING MACHINERY.—The Demming Co., Salem, Ohio. Catalog No. 22; flexible cloth; 5 × 8 ins.; pp. 296; illustrated.

The numerous styles of power pumps and similar machinery designed for almost every commercial use are described and illustrated with complete information regarding the especial use for which they are designed. A large portion of the book is devoted to a description of small or household pumps.

BRICK - MAKING MACHINERY.—G. O. Bartlett & Snow Co., Cleveland, Ohio. Paper; 6 × 9 ins.; pp. 32; illustrated.

This circular gives illustrations and brief descriptions of the brick-making machinery made by this company. This includes machinery especially designed for soft-mud brick such as dryers, brick-forming machines, pug mills, disintegrators, conveyors and cylindrical dryers.

STREET LIGHTING.—General Electric Co., Schenectady, N. Y. Bulletin 4689; paper; 8 × 10½ ins.; pp. 24; illustrated.

In this artistic publication the use of tungsten lamps on more or less ornamental street fixtures is taken up. The sidewalk posts in use in New York, Washington, Los Angeles, Minneapolis, San Francisco, and other cities of this country are shown by night photographs. The illustrations are accompanied by running comments on the different installations.

TRACTION ENGINES AND WAGONS.—The Russell & Co., Massillon, Ohio. Paper; 7¾ × 10½ ins.; pp. 32; illustrated.

These engines are for agricultural and general haulage purposes, and some of the views show them in use for hauling grading machines on irrigation work. They are built both simple and compound, with the cylinders mounted on the forward end of a loco-tubular boiler. The wagons for haulage service have steel wheels and running gear, and are so arranged that in turning curves or corners all wheels will "track," or follow the same path, however many wagons are coupled in the train.

PNEUMATIC SEPARATORS AND COLLECTORS. — Griscom-Spencer Co., 90 West St., New York City, Catalog 101. Paper; 6 × 9 ins.; pp. 23; illustrated.

The illustrations in this catalog give the most comprehensive idea of the work performed by the use of these systems. They show the collection of refuse from saws and other machines, exhaust collertocs for light materials, compound separating and collecting systems; blast separators and collectors; combined separator and grader and a system for gas scrubbing and smoke consuming. The cuts being large, with the text on the opposite page, make this catalog a convenient one to follow.

NATIONAL MOTOR-DRIVEN AIR COMPRESSOR.—National Brake & Electric Co., Milwaukee, Wis. Paper; 6 × 9 ins.; pp. 36; illustrated.

The air-compressors described in this pamphlet have three single-acting cylinders driven from a common shaft. The electric motor which drives them is mounted upon the same base, and drives a pinion meshing with a gear on the air-compressor shaft. The teeth in the gear and pinion are of herring-bone type. Special governing devices are attached, by which the electric motor circuit is opened and closed according to the pressure in the air receiver. The valves for these compressors are made of nickel steel.

ELECTRICAL APPARATUS.—General Electric Co., Schenectady, N. Y. Bulletins 4706 and 4713; paper; 8 × 10½ ins.; illustrated.

In Bulletin 4706 a type of curve-drawing ammeter and volt-meter is shown. The instrument is designed for use on either alternating or direct current. They are a simple round type with 8-in. charts.

Bulletin 4713 describes two types of oil-break switches for alternating-current circuits of 440 to 15,000 volts. The company recommends such switches for switching all alternating-current circuits between these voltage limits. The construction of the switches is briefly outlined, and three pages of the bulletin are devoted to diagrams showing possible electrical dimensions.

EXHAUST-STEAM TURBINES. — General Electric Co., Schenectady, N. Y. Bulletin 4712; paper; 8 × 10½ ins.; pp. 18; illustrated.

This bulletin is a reprint of the paper read by Messrs. W. S. Twining and W. C. Kerr before the Philadelphia Section of the American Institute of Electrical Engineers, Oct. 12, 1908. It describes an installation of an exhaust-steam turbine at the Thirteenth and Mt. Vernon Sts. power-house of the Philadelphia Rapid Transit Co. The paper, as shown in this bulletin, is reprinted from "Power and The Engineer."

AUTOMATIC SEWAGE EJECTORS.—The Blaisdell Machinery Co., Bradford, Pa. Paper; 6 × 9¼ ins.; pp. 18; illustrated.

The sewage ejector to which this pamphlet is devoted was formerly manufactured by The Ellis Co. Patents on the ejector issued to George D. Woodall are now the property of the above-named company. The ejector may be operated by either steam or compressed air, and, like others of this general type, may be used for removing any sort of liquid or semi-liquid waste, or seepage water from levels below the sewer. A marine type of the ejector for use on ships is figured. A page is devoted to siphon ejectors for use in connection with the 1 to 4-in. discharge pipes, and giving rates of capacity of 500 to 8,000 gallons per hr.

CONTRACTORS' MACHINERY.—Harold L. Bond Co., 383×391 Atlantic Ave., Boston, Mass. Paper; 7 × 10 ins.; pp. 288; illustrated.

A general catalog of contractor's tools and machines. This includes the small tools used by contractors engaged in general construction work. About 80 pages of the work is devoted to descriptions of hoisting machinery and kindred appliances. In this is included derricks, winches, windlasses, iron fittings for derricks and hoisting engines. Of especial interest to the outside contractor are the pages devoted to concrete mixers, rock drills, wheelbarrows and appliances for concrete workers. A line of jacks, both hand and hydraulic, is shown. That section devoted to mill supplies gives complete lists of belting, pulleys and the general line of supplies devoted to mill work.

SMALL POWER PLANTS.—General Electric Co., Schenectady, N. Y. Bulletins 4707 and 4711; paper; 8 × 10½ ins.; illustrated.

The first of these bulletins shows, in attractive form, some of the various direct-connected units which this company is putting out for the small and isolated type of power plant for such places as are not within reach of the distributing lines of a central station. Complete generating units, consisting of a direct-current generator mounted on the shaft of a gas or gasoline engine, are described rather generally. The pamphlet also pictures some of the many uses to which current from such a plant may be put.

The second bulletin describes some switchboards for small plants containing but one generating unit and one exciter.

DITCHING EXCAVATOR.—F. C. Austin Drainage Excavator Co., Railway Exchange Building, Chicago. Paper; 10¼ × 6¾ ins.; pp. 16; illustrated.

The special feature of this machine is that it cuts the bottom and slopes to any desired form, the excavator buckets working transversely upon a templet of the ditch cross-section and discharging the material on either side of the excavation. In a modified form, the machine travels on the side of the ditch, with the templet projecting fan on one side, and a discharge boom on the other side, the material in this case being used to form a levee. The machines have been used to form the trench for the lower section of the new concrete aqueduct for Los Angeles, Cal. In another machine a revolving wheel fitted with cutters excavates a trench with smooth and sloping sides. The material is delivered to a transverse belt conveyor. A revolving scraper-bucket or drag-line excavator is shown also.

ELECTRIC-RAILWAY EQUIPMENT. — General Electric Co., Schenectady, N. Y. Bulletins 4703A, 4714, 4715; paper; 8 × 10½ ins.; illustrated.

The first of these bulletins describes some radical improvements in automatic air-brake equipments necessary to adapt the older systems to high speeds, shorter headways, and more accurate stops for electric lines having heavy service. What is known as the "variable release" equipment is described. With this it is claimed to be possible to handle a long train nearly as easily as single cars could be handled with the straight air-brake system. The plan shows the whole equipment in general, and goes into detail with the motorman's valve which seems to be the most important mechanisms.

The second of these bulletins describes an instrument for testing circuits on automatic railway systems. This instrument is known as the "Signal Volt-Ammeter."

The third bulletin describes a 70-HP., 600-volt, direct-current railway motor. Sparking is prevented by commutating poles and it is claimed that the motor represents the latest construction of the company, in this class and capacity of apparatus. The bulletin gives a general description of the construction with tables and curves of performance, dimensions, etc.

TRACTION ENGINES AND AGRICULTURAL MACHINERY.—Avery Co., Peoria, Ill. Paper; 11½ × 8½ ins.; pp. 64; illustrated.

A special design of Avery engines is the locomotive type, having the cylinders and gears mounted beneath the boiler upon a steel frame, but engines with return-flue boilers carrying the machinery in the usual way are built slow. The details of construction are described and illustrated, and illustrations show the engines engaged in hauling graders, wagons, gang plans, etc. Special designs of the "locomotive" type are equipped with a crane or with a boom for handling a scraper bucket in excavation work. These engines can be adapted also for use as road rollers. Dump wagons, hauling wagons and tank wagons are described. About half of the pamphlet is devoted to threshing machines and their attachments.

CO_2 RECORDER.—Caldwell Co., 220 Broadway, New York City. Paper; 7 × 10 ins.; pp. 4; illustrated.

The Westover CO_2 recorder is described as a machine—not an instrument. There are no vertically moving vessels, no rubber tubing, syphons, glass operating parts, nor capillary tubes. The CO_2 is absorbed, as in the Orsat and other hand analyzers, by a solution of caustic potash and the operation is similar to that of the standard Orsat apparatus. The records are made by electrical contact. Two floats, one on each of the two water surfaces, bear platinum contact points which touch each other and complete the circuit when the two surfaces come to the same level. The machine is said to be free from any sensitive parts and an accuracy of ¼ of 1% is guaranteed in regular working. The one machine, as regularly furnished, makes alternately records from four different boilers and these records are made in plain view. The interval between analyses is 1½ minutes so that the CO_2 for each boiler is recorded every 4½ minutes. The net selling price is given as $400.

METAL SANITARY AND FIREPROOF EQUIPMENT FOR FACTORIES, ETC.—Manufacturing Equipment & Engineering Co., Boston, Mass. Paper; 6 × 9 ins.; pp. 32; illustrated.

One of the most interesting portions of this pamphlet is that which desribes a system of individual metal washbowls to be erected in single or in double batteries for use in shops and factories. Briefly, vertical standards support a horizontal water-supply main which in turn supports the framework which holds the individual basins. Each of the basins is a separate casting and can be emptied by tipping either to the front or back around the end support. Choice is to be had between self-closing faucets for each basin or a supply to all of the basins in each gang. The basins are furnished either in single or double lines and each gang empties into a common trough, thus necessitating but one outlet connection for each gang. There is no possibility of one basin being flooded by water from another. The basins may be occupied for either hot and cold water separately or else mixed. Besides the wash basins, a variety of metal lockers for individual workmen, locker seats, stock racks and shelving, vault fixtures, chairs, bench legs, drawing stands, spittons and other shop and factory accessories are described and illustrated.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 144.

PAVING.

Oil City, Pa.

Sealed proposals will be received at the office of the undersigned, up to 7.30 p. m., Monday, April 25, 1910, for grading, curbing and paving certain streets in the City of Oil City, Pa., comprising work in the following approximate amounts:

Excavation	15,000 cu. yds.
Curbing	17,000 lin. ft.
Brick paving	[illegible] sq. yds.
Retaining walls	[illegible] cu. yds.
Sidewalks	[illegible] sq. ft.
4'0" × 4'8" concrete conduit	[illegible] lin. ft.

Separate bids will be requ[illegible] for the different streets.

Plans, profiles and specificat[illegible] may be seen and blank forms and [illegible]cessary information obtained at the [illegible] of the City Engineer of said City.

The City reserves the righ[illegible] reject any or all bids.

C. W. MULL[illegible]EY, Controller.

Situations Wanted

Bridge and Structural Engineers.

DESIGNING and Estimating Engineer—structural steel and bridge work—now employed, would like to make change to similar position, or would accept position as contracting engineer, in Central States; salary and commission basis; technical graduate; seven years' experience. Address "E. B. 14," Engineering News, New York. 14-2t

STRUCTURAL and Mechanical Engineer, graduate, 12 years' experience on structural steel and plate work, with buildings, conveying and hoisting machinery, industrial plant layouts; responsible position only. Address "S. A. 14," Engineering News, New York. 14-3t

Surveyors.

YOUNG MAN (25), three years engineering experience as transitman and draftsman, desires position. Location immaterial. Address "X. A. 14," Engineering News, New York. 14-1t

RODMAN or Instrumentman, 1½ years' tunnel experience, 4 years Cooper Union. Address "C. A. 13," Engineering News, New York. 14-1t

Situations Open

WANTED—Experienced mechanical draftsman, capable of turning out work rapidly. Call at once, with samples of work and references. C. W. HUNT CO., West New Brighton, Staten Island, N. Y. 14-1t

FOUR DRAFTSMEN WANTED experienced on gas plant construction desirable. Good wages to competent men. Address "I. B. 14," Engineering News, New York. 14-3t

WANTED—Engineer for locomotive crane; steady position for reliable man. Address "Z. A. 14," Engineering News, New York. 14-1t

MECHANICAL ENGINEER wanted, experienced estimator, familiar hoisting machinery; state education, experience, reference and salary desired. Address "W. A. 14," Engineering News, New York. 14-1t

WANTED—Experienced man to run a ten-ton locomotive crane. Thirty-five miles from New York. Steady employment. Address "R. B. 14," Engineering News, New York. 14-3t

WANTED—About May 1st, young lady familiar with plan reading and general routine work in contractor's office. Must be accurate at figures and good writer. Address E. A. MATTHEWS, 13 Park Row, New York. 14-1t

WANTED—Timekeeper on mill construction, one familiar with use of transit and typewriter preferred; location, Niagara Falls. State salary, experience and references. Address BOX 807, Niagara Falls, N. Y. 14-1t

WANTED—Two competent draftsmen familiar with a general line of structural steel and bridge work. One at least should be a reliable checker. Give previous experience, salary expected, age and earliest date available. Address "W. A. 11," Engineering News, New York. 14-tf

WANTED—First-class draftsman, experienced in mill building work. State salary and experience. Address "X. B. 14," Engineering News, New York. 14-1t

HOISTING MACHINERY.—Salesman to work from New York office. Experience not necessary. State salary wanted. Address "Z. B. 13," Engineering News, New York. 14-tf

WANTED—Several experienced column detailers, liberal inducements to competent men. Address "Z. B. 14," Engineering News, New York. 14-1t

WANTED—Experienced draftsmen and checkers on shop drawings of structural steel for building work. PURDY & HENDERSON, 45 E. 17th St., New York City. 14-1t

Miscellaneous Wants

ENGINEER, long experience, instruments and some capital, seeks partner. Would enter established contracting or engineering company. Address "A. C. 14," Engineering News, New York. 14-1t